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US-08-988-024C-7
US-07-944-137-21
US-07-944-137-22
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US-09-155-613A-9
US-09-155-613A-9
US-09-155-613A-9
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                                                                            October 26, 2004, 07:06:01; Search time 22.25 Seconds (without alignments) 59.612 Million cell updates/sec
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(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
           GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
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PCT-US96-10602-2
US-09-489-039A-7940
US-09-252-991A-22049
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US-09-854-845-16
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US-09-854-845-12
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US-09-724-969-16
                                                                                                                                                                                                               478139 seqs, 66318000 residues
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                                                        - protein search, using sw model
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Gapop 60.0 , Gapext 60.0
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29973, A 6143, Ap 1187, Ap 59078, A

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403, App 3972, Ap 25, Appl 4, Appli

14, Ap 13, Ap 13, Ap 36, Ap 90, Ap Appli

7483, 5186, 11, Appl 3251, Ap 1, Appli

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135, App 137, App 139, App 139, App 140, App 141, App 143, App 144, App 146, App 146, App 147, App 147, App 149, App 153, App 155, App 155, App 156, App 166, App 166

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Patent No. 6399296
GENERAL INFORMATION:
APPLICANT: Brent, Roger
APPLICANT: McCoy, John M.
APPLICANT: Jessen, Timm H.
APPLICANT: Xu, Chanxing Wilson
TITLE OF INVENTION: INTERACTION TRAP SYSTEMS FOR DETECTING PROTEIN
UNMBER OF SEQUENCES: 28
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                                                                                         Sequence 12, Application US/08504538A

Sequence 12, Application US/08504538A

Patent No. 600446

GRNERAL INFORMATION:
APPLICANT: Brent, Roger

APPLICANT: McCoy, John M.
APPLICANT: Jessen, Timm H.
TITLE OF INVENTION: INTERACTION TRAP SYSTEMS FOR DETECTING TITLE OF INVENTION: PROTEIN INTERACTIONS

NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESSE: 21
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
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CITY: Boston
STATE: Massachusetts
COUNTRY: USA
ZIP: 02110-2214
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/504,538A
FILING DATE: 07/20/95
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Matches 13; Conservative 0; Mismatches
ALIGNMENTS
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 428-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 07/20/95
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/278,082
FILING DATE: 07/20/94
ATTONER/AGENT INFORMATION:
NAME: Paul T. Clark
REGISTRATION NUMBER: 30,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (61// ---
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APPLICANT: Brent, Roger
APPLICANT: McCoy, John M.
APPLICANT: Josen, Timm H.
APPLICANT: Xu, Chanxing Wilson
TITLE OF INVENTION: INTERACTION TRAP SYSTEMS FOR
TITLE OF INVENTION: DETECTING PROTEIN INTERACTIONS
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
                                                                                         ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/630,052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 3; Le . 2.1e-07;
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ZIP: 02110-2804
COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: PatentIn Release #1.0, Version
SOFTWARE: #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65.0%; Scc...
V 100.0%; Pred. No. 2...
                                                                                                                                                                                                                                                                                                                                                                                                                              35,238
ER: 00786/311001
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FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3: Fish & Richardson, P.C.
225 Franklin Street
ADDRESSEE: Fish & Richardson, P.C.
                                                                                                                                                                                                                                                 FILING DATE:

CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/504,538
FILING DATE: July 20, 1995
APPLICATION NUMBER: 08/276,082
FILING DATE: July 20, 1994
ATTORNEY/AGENT INFORMATION:
NAME: Karen F. Lech
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/31
TELEPHONE: (617) 542-5070
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCT-US95-09307-12; Sequence 12, Application PC/TUS9509307; GENERAL INFORMATION:
                    225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           not relevant
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INFORMATION FOR SEQ ID NO: 12:
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LENGTH: 20
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Matches 13; Conservative
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                                                          Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid STRANDEDNESS: not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TOPOLOGY: linear
US-08-630-052-12
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                                      Boston
                                                                             USA
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TELEX: 2
                                                                             COUNTRY:
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Gaps

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Sequence 32834, Application US/09252991A
Patent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: AEROGINGSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: AEROGINGSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: AEROGINGSA FOR DIAGNOSTICS AND THERAPEUTICS
CURRENT FILING DATE: 1999-02-18
PRIOR PELICATION NUMBER: US 60/074,788
PRIOR PELICATION NUMBER: US 60/074,788
PRIOR PELING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR SEQ ID NOS: 33142
                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
TITLE OF INVENTION: Nucleic 3326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 46865
                                                                                              DB 4; Length 135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4; Length 135; . 22;
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100.0%; Pred. No. 22;
tive 0; Mismatches
                                                                                          30.0%; Score 6; DB 4
100.0%; Pred. No. 22;
tive 0; Mismatches
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100.0%; Pred. No. 22;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                   ; Sequence 46865, Application US/09270767
; Patent No. 6703491
                             ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-32834
                                                                       Ouery Match
Best Local Similarity 100.
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Best Local Similarity 100...
6, Conservative
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Best Local Similarity
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US-09-270-767-46865
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                                     ; ORGANISM: Drosol
US-09-270-767-31648
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LENGTH: 138
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Fatent No. 6551795
GEMERAL INFORMATION:
FALLE No. 6551795
TITLE OF INVENTION: ACCIDEC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS:
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: ABRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: ABRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
CURRENT APPLICATION NUMBER: 1059-02-18
FRIOR APPLICATION NUMBER: US 60/074,788
FRIOR FILING DATE: 1999-02-18
FRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
LENGTH: 480
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Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NOS: 62517
SSEQ ID NO 31648
LENGTH: 135
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100.0%; Pred. No. 0.47;
tive 0; Mismatches
                                                        ATTORNEY/AGENT INFORMATION:
NAME: Paul T. Clark
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/288001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                             12:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6 WALGWRWLRRYGW 18
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1es 13; Conservative
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Best Local Similarity 100.
Matches 8; Conservative
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
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                                                                                                                                                                                                                                                                                    TYPE: amino acid STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 LGWRWLRR 15
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                                                                                                                                                                                                                                Length 277;
                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
US-09-247-890-16
Sequence 16, Application US/09247890
Patent No. 6541011
GENERAL INFORMATION:
APPLICANT: Bass, Steven H.
APPLICANT: Bass, Steven H.
APPLICANT: Whalen, Robert Gerald
APPLICANT: Whalen, Robert Gerald
APPLICANT: Stemmer, Willem P.C.
APPLICANT: Stemmer, Willem P.C.
APPLICANT: Stemmer, Willem P.C.
APPLICANT: Maxygen, Inc.
ITILE OF INVENTION: Antigen Library Immunization
FILE REFERENCE: 018097-028710US
CURRENT FILING DATE: 1999-02-10
EARLIER FILING DATE: 1998-02-11
BARLIER FILING DATE: 1998-02-11
BARLIER FILING DATE: 1998-10-23
NUMBER OF SEQ ID NOS: 25
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CURRENT APPLICATION NUMBER: US/09/724,969
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: 09/247,890
PRIOR FILING DATE: 1999-02-10
PRIOR APPLICATION NUMBER: US 60/105,509
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100.0%; Pred. No. 39;
tive 0; Mismatches
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100.0%; Pred. No. 38;
ative 0; Mismatches
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 17567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT ORGANISM: Woodchuck hepatitis B virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 16, Application US/09724969; Patent No. 6569435; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bass, Steven H.
Whalen, Robert Gerald
Howard, Russell
                                                                                                                                                                   ) ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-17567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stemmer, Willem P.C. Maxygen, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Patentin Ver. 2.0
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Best Local Similarity 100.
Matches 6; Conservative
                                                                                                                                                                                                                                                                                  6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                          265 WRWLRR 270
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Best Local Similarity
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APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                           LENGTH: 277
                                                                                                                                              TYPE: PRT
                                                                                                                                                                                                                                                                                       Matches
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Pacent No. 655175

GRNERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 00/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INCORMATION:
APPLICANT: MAIC J. RUBERFIELD AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION:
APPLICANT: MAIC J. RUBERFIELD AND THERAPEUTICS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1999-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 26918
LENGTH: 171
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; Sequence 26, Application US/09193104A
; Patent No. 6172193
; GENERAL INFORMATION:
; APPLICANT: Frind, Daniele
; APPLICANT: Frind, Daniele
; APPLICANT: Frind, Mario
; TITLE OF INVENTION: Bacape Mutant of the Surface Antigen of Hepatitis B
; TITLE OF INVENTION: Virus
; FILE REFERENCE: SBD1004US
; CURRENT APPLICATION NUMBER: US/09/193,104A
; CURRENT FILING DATE: 1998-11-16
; EARLIER FILING DATE: 1997-12-01
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: Patentin Ver. 2.0
; FEGURENT FILING DATE: 1997-12-01
; TOWART OF SEQ ID NOS: 44
; SOFTWARE: Patentin Ver. 2.0
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30.0%; Score 6; DB 4
Best Local Similarity 100.0%; Pred. No. 26;
Matches 6; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 26818, Application US/09252991A Patent No. 6551795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT; ORGANISM: Hepatitis B virus
US-09-193-104-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 SSWALG 126
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US-09-252-991A-17567
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US-09-489-039A-7940
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APPLICANT: Whalen, Robert Gerald
APPLICANT: Howard, Russell
APPLICANT: Howard, Russell
APPLICANT: Howard, Russell
APPLICANT: Stemmer, Willem P.C.
APPLICANT: Stemmer, Willem P.C.
TITLE OF INVENTION: Antigen Library Immunization
FILE REFERENCE: 018097-028100S
CURRENT APPLICATION NUMBER: US/09/24,852
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US/09/247,890
PRIOR PILING DATE: EARLIER FILING DATE: 1998-02-11
PRIOR PELING DATE: EARLIER FILING DATE: 1998-02-11
PRIOR FILING DATE: EARLIER FILING DATE: 1998-10-23
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PATCHIN Ver. 2.0
LENGTH: 282
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GENERAL INFORMATION:
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: INHIBITION OF HEPATITIS B REPLICATION
WUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSE: 158h & Richardson P.C.
STREET: 225 Franklin Street
                                                                                                                                                                           Length 282;
                                                                                                                                                                                                                  0; Indels
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                                                                                                                                                                       30.0%; Score 6; DB 4;
100.0%; Pred. No. 39;
ative 0; Mismatches
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100.0%; Pred. No. 39;
tive 0; Mismatches
                                                                                          ; TYPE: PRT
; ORGANISM: Woodchuck hepatitis B virus
US-09-724-969-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Woodchuck hepatitis B virus
                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 16, Application US/09724852; Patent No. 6576757
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ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC COMpatible
PRIOR FILING DATE: 1998-10-23
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn Ver. 2.0
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Best Local Similarity 100.
Matches 6; Conservative
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APPLICANT: Punnonen, Juha
                                                                                                                                                                                                                                                                                   210 SSWALG 215
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Best Local Similarity
Matches 6; Conserv
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STATE: MA
                                                   SEQ ID NO 16
LENGTH: 282
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GENERAL INFORMATION:
APPLICANT: Keith Weinstock et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICANG
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.132
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APPLICANT: Gary Breton et. al

ITILE OF INVENTION: NUCLEEC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
TITLE OF INVENTION: NUMBER: US/09/489,039A
CURRENT PELICATION NUMBER: US/09/489,039A
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 14342
SEQ ID NO 7940
LENGTH: 395
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                 SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/10602
FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30.0%; Score 6; DB 4;
100.0%; Pred. No. 51;
cive 0; Mismatches
                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/017,814
FILING DATE: 20-JUN-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30.162
REFERENCE/DOCKET NUMBER: 00786/282001
TELEPHONE: 617/542-8906
TELEFAX: 617/542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
30.0%; Score 6; DB 5
Best Local Similarity 100.0%; Pred. No. 46;
Matches 6; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 7940, Application US/09489039A
Patent No. 6610836
PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       346 amino acids
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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Best Local Similarity 100.
Matches 6; Conservative
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APPLICANT: Walke, D. Wade
APPLICANT: Wang, Xiaoming
APPLICANT: Wang, Xiaoming
APPLICANT: Covariale, John
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: No. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encod
FILE REFERENCE: LEX-0177-USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEPLICANT: Walke, D. Wade
APPLICANT: Walke, D. Wade
APPLICANT: Walke, Xiaoming
APPLICANT: Wang, Xiaoming
APPLICANT: Wang, Xiaoming
APPLICANT: Turner, C. Alexander Jr.
APPLICANT: Turner, C. Alexander Jr.
ITTLE ON INVENTION: NO. 6750054el Human Semaphorin Homologs and Polymucleotides Encod
FILE REFERENCE: LEX-0177-USA
CURRENT APPLICATION NUMBER: 209-05-14
PRIOR APPLICATION NUMBER: US 60/205,274
PRIOR APPLICATION NUMBER: US 60/205,893
PRIOR PRIOR TLING DATE: 2000-06-02
NUMBER OF SEQ ID NOS: 50
SOFTWARE: FASISEQ for Windows Version 4.0
SEQ ID NO 14
LENGTH: 954
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30.0%; Score 6; DB 4; Length 954;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 6; Conservative 0; Mismatches 0; Indels
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                             Length 800;
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100.0%; Bred. No. 1.
                               Score 6; DB 4;
Pred. No. 90;
                    30.0%; Scor.
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT PEPLICATION NUMBER: US/09/854,845
CURRENT FILING DATE: 2001-05-14
PRIOR APPLICATION NUMBER: US 60/205,274
PRIOR PILING DATE: 2000-05-18
PRIOR APPLICATION NUMBER: US 60/208,893
PRIOR FILING DATE: 2000-06-02
NUMBER OF SEQ ID NOS: 50
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 16
LENGTH: 939
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; Patent No. 6750054
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Best Local Similarity 100.
                                     Query Match
Best Local Similarity 100.
Matches 6; Conservative
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US-09-854-845-16
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                                                                                                                                                       487 WRWLRR 492
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US-09-252-991A-24635
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US-09-854-845-14
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patent No. 6551795

GENERAL INFORMATION:

APPLICATION:

TITLE OF INVENTION:

TITLE OF INVENTION:

TITLE OF INVENTION:

PRIOR PAPLICATION NUMBER: US/09/252,991A

CURRENT FILING DATE: 1999-02-18

PRIOR APPLICATION NUMBER: US 60/074,788

PRIOR APPLICATION NUMBER: US 60/094,190

PRIOR FILING DATE: 1998-07-18

PRIOR FILING DATE: 1998-07-27

WINDER OF SEQ ID NOS: 33142

LENGTH: 478
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Partent No. 6551795

GENERAL INFORMATION:
APPLICANT: MARC J. Rubenfield et al.
APPLICANT: MARC J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS;
TITLE OF INVENTION: NUMBER: 136

CURRENT APPLICATION NUMBER: US 60/074,788

PRIOR FILING DATE: 1999-02-18

PRIOR FILING DATE: 1999-02-18

PRIOR FILING DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 33142
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                                                                                                                                                                                                                                                               30.0%; Score 6; DB 4;
100.0%; Pred. No. 54;
tive 0; Mismatches
CURRENT APPLICATION NUMBER: US/09/248,796A CURRENT FILING DATE: 1999-02-12 PRIOR APPLICATION NUMBER: US 60/074,725 PRIOR FILING DATE: 1998-02-13 RICR APPLICATION NUMBER: US 60/096,409 PRIOR FILING DATE: 1998-08-13 NUMBER OF SEQ ID NOS: 28208
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ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                  TYPE: PRT
ORGANISM: Candida albicans
US-09-248-796A-20409
                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100..
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                                                                                                                                                                                                                                                                                                                                                                                      129 ALGWRW 134
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US-09-252-991A-24635
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US-09-252-991A-22078
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LENGTH: 800
                                                                                                                                                                  LENGTH: 421
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Sequence 8, Application US/09854845

Patent No. 6750054

GENERAL INFORMATION:
APPLICANT: Walke, D. Wade
APPLICANT: Wang, Xiaoming
APPLICANT: Turner, C. Alexander Jr.
TILE OF INVENTION: No. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encodi
FILE OF INVENTION: No. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encodi
FILE OF INVENTION: No. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encodi
FILE OF INVENTION: No. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encodi
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FILE OF INVENTION: NO. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encodi
FILE OF INVENTION: NO. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encodi
FILE OF INVENTION: SOURCE OF SOURCE OF
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Patent No. 6750054
GENERAL INFORMATION:
APPLICANT: Walke, D. Wade
APPLICANT: Wang, Xiaoming
APPLICANT: Scoville, John
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: NO. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encodi
FILE REFERENCE: LEX-0177-USA 845
CURRENT FILING DATE: 2000-05-14
PRIOR PILING DATE: 2000-05-18
PRIOR PILING DATE: 2000-06-02
PRIOR FILING DATE: 2000-06-02
NUMBER OF SEQ ID NOS: 50
SOFTWARE: FastSEQ for Windows Version 4.0
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Pred. No. 1.2e+02;
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; Sequence 12, Application US/09854845
; Patent No. 6750054
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Best Local Similarity 100.00
Thes 6; Conservative
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US-09-854-845-8
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Best Local Similarity
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LENGTH: 1093
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US-09-854-845-4
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Fatent No. 6750054

GENERAL INFORMATION:

APPLICANT: Wang, Xiaoming

APPLICANT: Wang, Xiaoming

APPLICANT: Wang, Xiaoming

APPLICANT: Wang, Xiaoming

APPLICANT: Turner, C. Alexander Jr.

TITLE OF INVENTION: No. 6750054e1 Human Semaphorin Homologs and Polymucleotides Encod

FILE REFERENCE: LEX-0177-USA

CURRENT APPLICATION NUMBER: US 60/205,274

PRIOR APPLICATION NUMBER: US 60/205,274

PRIOR PLILNG DATE: 2000-06-18

FRIOR APPLICATION NUMBER: US 60/206,893

PRIOR FILING DATE: 2000-06-02

NUMBER OF SEQ ID NOS: 50

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 2

LENGTH: 1049
                                                                                                                                                                                                                                                                     GENERAL INFORMATION:

APPLICANT: Walke, D. Wade

APPLICANT: Turner, C. Alexander Jr.

TITLE OF INVENTION: No. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encod

CURRENT APPLICATION NUMBER: US/09/854,845

CURRENT APPLICATION NUMBER: US 60/205,274

PRIOR APPLICATION NUMBER: US 60/205,274

PRIOR APPLICATION NUMBER: US 60/208,893

PRIOR APPLICATION NUMBER: US 60/208,893

PRIOR APPLICATION NUMBER: US 60/208,893

PRIOR APPLICATION NUMBER: OS 000-06-02

SOFTWARE: FastSRQ for Windows Version 4.0

SEQ ID NOS: 50
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Patent No. 6750054
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Best Local Similarity 100..v
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ORGANISM: homo sapiens
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ORGANISM: homo sapiens
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Best Local Similarity
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3 WSSWAL
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US-08-988-024C-7

i Sequence 7, Application US/08988024C

i Sequence 7, Application US/08988024C

i Batent No. 6635452

i GENERAL INFORMATION:

APPLICANT: Moniforte, Joseph A.

APPLICANT: Becker, Christopher H.

APPLICANT: Backer, Christopher H.

APPLICANT: Pollart, Daniel J.

APPLICANT: Backer, Christopher H.

PRINGEN APPLICATION NUMBER: US 60/033,037

PRIOR APPLICATION NUMBER: US 60/033,037

PRIOR APPLICATION NUMBER: US 60/046,719

PRIOR APPLICATION NUMBER: US 60/046,719

PRIOR APPLICATION NUMBER: 1997-05-16

NUMBER OF EQ ID NOS: 36

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 7

LENGTH: 12
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TITLE OF INVENTION: 3A, 77, AND 96 THAT ENCODE ANTI-MICROBIAL POLYPEPTIDES FILE REFERENCE: 073406-0404
CURRENT APPLICATION NUMBER: US/09/676,519
CURRENT FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: 09/407,804
PRIOR FILING DATE: 1999-09-28
PRIOR FILING DATE: 1998-12-03
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PARENTIN Ver. 2.1
SEQ ID NO 27
LENGTH: 1509
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Sequence 21, Application US/07944143C

Patent No. 5719064

GRNERAL INFORMATION:

APPLICANT: Scofield, R. Hal

APPLICANT: Harley, John B.

TITLE OF INVENTION: Peptide Diagnostics and Therapeutics for INVENTION: Spondyloarthropathies

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                      30.0%; Score 6; DB 4; Length 1509; 100.0%; Pred. No. 1.5e+02; ative 0; Mismatches 0; Indels
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100.0%; Pred. No. 35;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                ; ORGANISM: Staphylococcus bacteriophage US-09-676-519-27
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Best Local Similarity 100...
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Best Local Similarity
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US-07-944-143C-21
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APPLICANT: Walke, D. Wade
APPLICANT: Wang, Xiaoming
APPLICANT: Wang, Xiaoming
APPLICANT: Scoville, John
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: No. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encod
FILE REPERENCE: LEX-0177-USA
CURRENT APPLICATION NUMBER: US 60/205,274
PRIOR APPLICATION NUMBER: US 60/205,274
PRIOR APPLICATION NUMBER: US 60/205,274
PRIOR PILING DATE: 2000-05-18
PRIOR PILING DATE: 2000-06-02
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NOS: 50
SEQ ID NOS: 50
LENGTH: 1151
                                       APPLICANT: Walke, D. Wade
APPLICANT: Walke, D. Wade
APPLICANT: Walke, John
APPLICANT: Wang, Xiaoming
APPLICANT: Turner, C. Alexander Jr.

ITILE OF INVENTION: No. 6750054e1 Human Semaphorin Homologs and Polynucleotides Encod
FILE REPERBENCE: LEX-017-05A
CURRENT APPLICATION NUMBER: US/09/854,845
CURRENT FILING DATE: 2001-05-14
PRIOR PILING DATE: 2000-05-18
PRIOR PILING DATE: 2000-06-02
NUMBER OF SEQ ID NOS: 50
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NOS: 50
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APPLICANT: GROS, PHILLIPPE
APPLICANT: DUBOW, MICHAEL
TITLE OF INVENTION: DNA SEQUENCES FROM STAPHYLOCOCCUS AUREUS BATERIOPHAGES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30.0%; Score 6; DB 4; Length 1136; 100.0%; Pred. No. 1.2e+02; ive 0; Mismatches 0; Indels
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Patent No. 6750054
GENERAL INFORMATION:
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Best Local Similarity 100.
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Best Local Similarity 100.
Matches 6; Conservative
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US-09-854-845-10
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ORGANISM: homo sapiens
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                        GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 1136
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APPLICANT: Boulanger, Pierre
APPLICANT: Boulanger, Pierre
APPLICANT: Boulanger, Daw See
APPLICANT: Hong, Saw See
APPLICANT: Hong, Saw See
APPLICANT: Narrayan, Lucie
ITILE OF INVENTION: Use of a Polypeptide as Cell Receptor for Adenoviruses
FILE REFERENCE: 032751-036
FURRENT APPLICATION NUMBER: US/09/155,613A
CURRENT FILING DATE: 1998-01-30
PRIOR APPLICATION NUMBER: PCT/FR98/00184
PRIOR PLING DATE: 1997-01-30
PRIOR PLING DATE: 1997-01-30
PRIOR APPLICATION NUMBER: FR 97/11166
PRIOR PLING DATE: 1997-09-99
NUMBER OF SEQ ID NOS: 98
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 6
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APPLICANT: Curiel, David T.
APPLICANT: Douglas, Joanne T.
APPLICANT: David T.
APPLICANT: David T.
APPLICANT: David T.
APPLICANT: MAINTION: Victor N.
APPLICANT: David T.
APPLICANTION: Fiber Receptor Independent System for the TITLE OF INVENTION: Propagation of Adenoviral Vectors
                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                            Length 19;
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                                                                                                                                                                                                                                                                                                                                        25.0%; Score 5; DB 5;
100.0%; Pred. No. 51;
tive 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 25.0%; Score 5; DB 4 Best Local Similarity 100.0%; Pred. No. 53; Matches 5; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ) OTHER INFORMATION: Synthetic peptide MH20 US-09-155-613A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 6, Application US/09155613A Patent No. 6420120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3, Application US/09498134A Patent No. 6649396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Artificial Sequence
                       TELERAX: (404) 815-6555
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 100.
Matches 5; Conservative
                                                                                                                                                                                                                                      internal
                                                                                                            TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                         12 WLRRY 16
                                                                                                                                                                                                                                FRAGMENT TYPE: i
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          TELEPHONE:
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GENERAL INFORMATION:
APPLICANT: Oklahoma Medical Research Foundation
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Klipatrick & Cody
STREET: 1100 Peachtree Street, Suite 2800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 19; . 51;
                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/944,143C
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/08214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25.0%; Scor.
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                 CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Pabst. Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: OMF138
TELECOMMUNICATION INFORMATION:
TELEFAX: (404)873-8794
TELEFAX: (404)873-8795
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
2800 One Atlantic Center
1201 West Peachtree Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OMRF138
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ATTORNEY/AGENT INFORMATION:
NAME: Pabet, Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/POCKET NUMBER: ORRETECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRACKENT TYPE: internal
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 5, Conservative
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COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        internal
                                                                                                    ZIP: 30309-3450
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                  30309-3450
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                                        Atlanta
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                                                                                   USA
                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
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PCT-US93-08214-21
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Gaps

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Indels Length 21;

0; Mismatches

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25.0%; Score 5; DB 1; 100.0%; Pred. No. 55;
  Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
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                                                                                                                  2 WLRRY
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US-07-944-143C-20
is Sequence 20, Application US/07944143C
is Patent No. 5719064
is GENERAL INFORMATION:
APPLICANT: Scofield, R. Hal
APPLICANT: Harley, John B.
TITLE OF INVENTION: Spondyloarthropathies
it TITLE OF INVENTION: Spondyloarthropathies
it TITLE OF INVENTION: Spondyloarthropathies
it CORRESPONDENCES: 30
CORRESPONDENCE ADDRESS:
it STREET: 2800 One Atlantic Center
STREET: 2800 One Atlantic Center
STREET: 1201 West Peachtree Street
                                                                                                                                                                                                            FEATURE: OTHER INFORMATION: amino acid sequence of the icosapeptide MH20, OTHER INFORMATION: the extracellular virus-binding domain of the OTHER INFORMATION: second artificial receptor
                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                                                                                             25.0%; Score 5; DB 4; Length 20; 100.0%; Pred. No. 53; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 30109-3450
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/944,143C
        FILE REFERENCE: D6159
CURRENT APPLICATION NUMBER: US/09/498,134A
CURRENT FILING DATE: 2000-02-03
PRIOR APPLICATION NUMBER: US 60/118,880
PRIOR FILING DATE: 1999-02-05
NUMBER OF SEQ ID NOS: 11
SEQ ID NO 3
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,284
REGISTRATION NUMBER: 31,284
REFERENCEY/OCKET NUMBER: OMRF136
TELECOMMUNICATION: TELECOMMUNICATION: (404)873-8794
TELEFRAX: (404)873-8795
                                                                                                                                                                         TYPE: PRT ORGANISM: artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (404)873-8795
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 amino acids
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                                                                                                                                                                                                                                                                                                                                                                         5; Conservative
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STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 5; Conserv
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US-07-944-143C-20
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for Spondyloarthropat
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Patent No. 6420120

GENERAL INFORMATION

APPLICANT: Boulanger, Pierre

APPLICANT: Hong, Saw See

APPLICANT: HONG, Saw See

TITLE OF INVENTION: Use of a Polypeptide as Cell Receptor for Adenoviruses

FILE REFERENCE: 032751-036

CURRENT APPLICATION NUMBER: US/09/155,613A
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0; Indels
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                                                                                                                                                                 CITY: Atlanta
STATE: Georgia
COUNTRY: United States
ZIP: 330309-4530
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: DatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/08214
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 5;
                                                                                                                             ADDRESSEE: Kilpatrick & Cody
STREET: 1100 Peachtree Street, Suite 2800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25.0%; Score 5; DB 5
100.0%; Pred. No. 55;
Live 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                         OMRF138
                                                                                                                                                                                                                                                                                                                                                                                                                                         31,284
                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: OM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (404) 815-6508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (404) 815-6508
TELEFAX: (404) 815-6555
INFORMATION FOR SEQ ID NO: 20:
                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
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PCT-US93-08214-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 21 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        single
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US-09-155-613A-23; Sequence 23, Application US/09155613A; Patent No. 6420120
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100.0%; Pre
                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Phagotope US-09-155-613A-98
                                                                                                                                                                                                                                                                                                                             Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Homu
US-09-155-613A-22
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APPLICANT: Boulanger, Pierre
APPLICANT: Boulanger, Pierre
APPLICANT: Boulanger, Saw See
APPLICANT: Hong, Saw See
APPLICANT: Hong, Saw See
TITLE OF INVENTION: Use of a Polypeptide as Cell Receptor for Adenoviruses;
FILE REPREBRENCE: 032731-036
CURRENT APPLICATION NUMBER: US/09/155,613A
CURRENT APPLICATION NUMBER: PST/FR98/00184
FRICH PAPLICATION NUMBER: PST/FR98/00184
FRICH PAPLICATION NUMBER: PS 97/01005
FRICH APPLICATION NUMBER: FS 97/01005
FRICH APPLICATION NUMBER: FS 97/11166
FRICH FILING DATE: 1997-09-09
NUMBER OF SEQ ID NOS: 98
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1.
                                                                                                                                                                                                                                                                                                                                                                                               0
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Sequence 98, Application US/09155613A

Patent No. 6420120

GENERAL INFORMATION:
APPLICANT: Hong, Saw See
APPLICANT: Karayan, Lucie
TITLE OF INVENTION: Use of a Polypeptide as Cell Receptor for Adenoviruses
FILE REFERENCE: 032751-036

CURRENT APPLICATION NUMBER: U5/09/155,613A

CURRENT FILING DATE: 1998-09-30
                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25.0%; Score 5; DB 4; 100.0%; Pred. No. 63; tive 0; Mismatches
      PRIOR APPLICATION NUMBER: PCT/FR99/00184
PRIOR FILING DATE: 1998-01-30
PRIOR FILING DATE: 1998-01-30
PRIOR FILING DATE: 1997-01-30
PRIOR FILING DATE: 1997-01-30
PRIOR FILING DATE: 1997-09-09
NUMBER: FR 97/11166
PRIOR FILING DATE: 1997-09-09
NUMBER: PS 97/11166
PRIOR FILING DATE: 1997-09-09
NUMBER: PSEQ ID NOS: 98
SEQ ID NO 97
LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/09155613A Patent No. 6420120
1998-09-30
                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                ) OTHER INFORMATION: Phagotope US-09-155-613A-97
                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
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US-09-155-613A-1
CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                             12 WLRRY 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11 WLRRY 15
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                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 37
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APPLICANT: Boulanger, Pierre
APPLICANT: Hong, Saw See
APPLICANT: Hong, Saw See
APPLICANT: Rarayan, Lucie
ITILE OF INVERTION: Use of a Polypeptide as Cell Receptor for Adenoviruses
CURRENT PAPLICATION NUMBER: US/09/155,613A
CURRENT FILING DATE: 1998-01-30
PRIOR PILING DATE: 1998-01-30
PRIOR PILING DATE: 1998-01-30
PRIOR FILING DATE: 1997-01-30
SOFTWARE: FAST SEE OF Windows Version 4.0
SEQ ID NO 22
LENGTH: 35
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APPLICANT: Boulanger, Pierre
APPLICANT: Hong, Saw See
APPLICANT: Hong, Saw See
TITLE OF INVENTION: Use of a Polypeptide as Cell Receptor for Adenoviruses
FILE REFERENCE: 032751-036
CURRENT APPLICATION NUMBER: US/09/155,613A
CURRENT FILING DATE: 1996-09-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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100.0%; Pred. No. 63;
tive 0; Mismatches
PRIOR APPLICATION NUMBER: PCT/FR98/00184
PRIOR FILING DATE: 1998-01-30
PRIOR FILING DATE: 1998-01-30
PRIOR APPLICATION NUMBER: FR 97/01005
PRIOR APPLICATION NUMBER: FR 97/11166
PRIOR FILING DATE: 1997-09-09
NUMBER OF SEQ ID NOS: 98
SOFTWARE: FastSEQ for Windows Version 4.0
SOFTWARE: 28
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Iowa
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ZIP: 50309
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                                RESULT 41
US-08-440-174A-7
                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE:
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                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                          Length 35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: Unitted -. 21P: 50309
COMPUTER READBLE FORM: MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb storage COMPUTER: IBM Compatible COMPUTER: IBM Compatible OPERATING SYSTEM: MS-DOS/Microsoft Windows SOFTWARE: Microsoft Windows No. 5607914epad CURRENT APPLICATION DATA: W108/179,632
FILING DATE: US/08/179,632
FILING DATE: US/08/179,512
MAPLICATION NUMBER: 20,342
FILING DATE: US/08/18/33
ATTORNEY/AGENT INFORMATION:
MAME: Roch, Michael J.
REGISTRATION NUMBER: 29,342
REFERRING FOCKET NUMBER: 29,342
REGISTRATION NUMBER: 29,342
REJCOMMUNICATION INFORMATION:
TELEPHONE: (515) 245-3594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Rao, A. Gururaj; Zhong, Lingxiu
TITLE OF INVENTION: SYNTHETIC ANTIMICROBIAL PEPTIDES
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: Pioneer Hi-Bred International, Inc
STREET: 700 Capital Square, 400 Locust Street
CITY: Des Moines
STATE: Low
COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25.0%; Score 5; DB 1;
100.0%; Pred. No. 88;
iive 0; Mismatches
                                                                                                                                                                                                                                              DB 4;
                                                                                                                                                                                                                                            25.0%; Score 5; DB 4
100.0%; Pred. No. 82;
cive 0; Mismatches
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PRIOR FILING DATE: 1998-01-30
PRIOR APPLICATION NUMBER: FR 97/01005
PRIOR FILING DATE: 1997-01-30
PRIOR APPLICATION NUMBER: FR 97/11166
PRIOR FILING DATE: 1997-09-09
NUMBER OF SEQ ID NOS: 98
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 23
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 7, Application US/08179632
Patent No. 5607914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (515) 245-3634
INFORMATION FOR SEQ ID NO: 7
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Iowa
· United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 38 amino acids
TYPE: amino acid
STRANDEDNESS: single
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Best Local Similarity 100.
                                                                                                                                                                                        ORGANISM: Homo sapiens
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Best Local Similarity
Fre 5; Conserve
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                                                                                                                                                                                                                                                                                                                    12 WLRRY 16
                                                                                                                                                                                                                                                                                                                                                       25 WLRRY 29
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US-08-179-632-7
                                                                                                                                                                        TYPE: PRT
                                                                                                                                                     LENGTH:
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RWLRR 12

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Gaps
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GENERAL INFORMATION:
APPLICANT: Priones Hi-Bred International, Inc.
TITLE OF INFORMATION:
NUMBER OF SEQUENCES: 22
CORRESPONDENCES: 22
CORRESPONDENCE: Prione Hi-Bred International, Inc.
ADDRESSE: Pioneer Hi-Bred International, Inc.
STREET: 700 Capital Square, 400 Locust Street
Sequence 7, Application US/08440174A
Patent No. 5717061
GENERAL INFORMATION:
APPLICANT: Rao, Gururaj A.
APPLICANT: Zhong, Lingxiu
TITLE OF INVENTION: SYNTHETIC ANTIMICROBIAL PEPTIDES
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: PIONEER HI-BRED INTERNATIONAL, INC.
STREET: 7100 N.W. 62nd Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb storage COMPUTER: IRM Compatible OPERATING SYSTEM: MS-DOS/Microsoft Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SCPTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION UNDER: US/08/440,174A FILING DATE: 12-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25.0%; Score .,
100.0%; Pred. No. 88;
.... 0; Mismatches
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PILING DATE:
12-MAY-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 08/079,512
FILING DATE: 18-UN-1993
ATTORNEY/AGENT INFORMATION:
NAME: BODTOWICZ, DOMDA
REJESTRATION NUMBER: 32,196
REFERENCE/DOCKET NUMBER: 0234R2D-US
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION SEQ 1D NO: 7:
SEQUENCE CHARACTERISTICS:
TEMPORMATION FOR SEQ 1D NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    United States
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Best Local Similarity 100.
Matches 5; Conservative
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amino acid
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Best Local Similarity
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US-09-134-001C-3836
                                          PCT-US94-14074-1
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                         RESULT 44
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:

APPLICANT: Dumas Milne Edwards, J.B.

APPLICANT: JODert, S.

APPLICANT: Glocadano, J.Y.

TITLE OF INVENTATION: ESTS and Encoded Human Proteins.

FILE REFERENCE: GENSET. 054PR2

CURRENT APPLICATION NUMBER: US/09/621,976

CURRENT FILING DATE: 2000-07-21

NUMBER OF SEQ ID NOS: 19335

SOFTWARE: Patent.pm

SEQ ID NO 4432

LENGTH: 51
                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Yates, Michael E.; Sweeney, Patricia A.;
NAME: Yates, Michael E.; Sweeney, Patricia A.;
NAME: Roth, Michael J.; & Simon, Soma G.
REGISTRATION NUMBER: 234R2-PCT
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1515 248-4800
TELEPAX: (515) 248-4800
TELEPAX: (515) 248-4844
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 5;
5.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25.0%; Score 5; DB 5
100.0%; Pred. No. 88;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: UNSURE
LOCATION: 23
OTHER INFORMATION: Xaa = Ala,Glu,Gly,Val
NAME/KEY: UNSURE
LOCATION: 19
OTHER INFORMATION: Xaa = Ala,Pro,Ser,Thr
                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: protein
DESCRIPTION: hordothionin derivative
Microsoft Windows Notepad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Xaa = Ile, Asn, Ser, Thr
US-09-621-976-4432
                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/00062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4432, Application US/09621976 Patent No. 6639063
                                                                                                                                                                                                                                                                                                                                LENGTH: 38 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
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Matches 5; Conservative
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                                                                     CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: UNSURE LOCATION: 31
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US-09-621-976-4432
SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                PCT-US95-00062-7
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APPLICANT: LYONGATION:
APPLICANT: LYONG SOURCE APPLICANT: LYONG STARFYLOCOCCUS
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAFFYLOCOCCUS
TITLE OF INVENTION: BEDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: GTC-007
CURRENT APPLICATION NUMBER: US 60/064,964
PRIOR PILING DATE: 1990-08-13
PRIOR FILING DATE: 1997-11-08
PRIOR FILING DATE: 1997-11-08
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5674
LENGTH: 61
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                                                                                                                                                                                                                                    ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & Norris STREET: One Liberty Place 46th Floor CITY: Philadelphia STATE: Pennsylvania
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25.0%; Score 5; DB 5; Length 60; 100.0%; Pred. No. 1.3e+02; ative 0; Mismatches 0; Indels
                                                                        APPLICANT: Manayary Inf. Andrew B
APPLICANT: Hau, Tin-Chen
APPLICANT: Jameson, Bradford A
APPLICANT: Litwack, Gerald
TITLE OF INVENTION: Biologically Active Compounds
NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                  COUNTRY: United States of America
ZIP: 19103
COMPUTER REDABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/14074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/164,102
FILING DATE: 07-DEC-1993
CLASSIFICATION:
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Sequence 1, Application PC/TUS9414074
GENERAL INFORMATION:
APPLICANT: Maksymowych, Andrew B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: DeLuca, Mark
REGISTRATION NUMBER: 33,229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: TJ
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-568-3100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 215-568-3439
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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GENERAL INFORMATION:
APPLICANT: Griffais, R.
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, preve
TITLE OF INVENTION: and treatment of infection
FILE REFERENCE: 9710-003-999
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; Sequence 6143, Application US/09513999C
; Patent No. 67899L
; GENERAL INFORMATION:
; APPLICANT: Dunds Milne Edwards, J.B.
; APPLICANT: Duclert, A.
; APPLICANT: Duclert, A.
; APPLICANT: Glordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; PATENT No. 678386L
; FILE REFERENCE: 59.US2.REG
; CURRENT PELICATION NUMBER: US/09/513,999C
; CURRENT FILING DATE: 2000-02-24
; FRIOR APPLICATION NUMBER: US 60/122,487
; PRIOR FILING DATE: 1999-02-26
; NUMBER OF SEQ ID NOS: 36681
; SOFFWARRE: Patent.pm
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                  Gaps
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                    Indels
  Pred. No. 1.5e+02;
Mismatches 0;
                    0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 59078, Application US/09270767; Patent No. 6703491; GENERAL INFORMATION:
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100.08;
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                      5; Conservative
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Best Local Similarity
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Best Local Similarity
Matches 5; Conserv
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                                                                 11 RWLRR 15
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US-09-270-767-59078
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US-09-198-452A-1187
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                                                                                                                                                                             RESULT 48
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APPLICANT: MARC U. Rubenfield et al.
APPLICANT: MARC U. Rubenfield et al.
APPLICANT: MARC U. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: ABRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER: US 60/094,190
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 29973
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; Sequence 4436, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION:
    APPLICANT: Duclert, A.
; APPLICANT: Duclert, A.
; APPLICANT: Glocato, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6783961
; FILE REFERENCE: 59.US2.REG
; CURRENT APPLICATION NUMBER: US/09/513,999C
; CURRENT APPLICATION NUMBER: US 60/122,487
; PRIOR PILING DATE: 1999-02-26
; NUMBER OF SEQ ID NOS: 36681
; SEQ ID NO 4436
; LENGTH: 62
; LENGTH: 62
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                                                                                          25.0%; Score 5; DB 3; Length 61; 100.0%; Pred. No. 1.3e+02; cive 0; Mismatches 0; Indels
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100.0%; Pred. No. 1.3
tive 0; Mismatches
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COTHER INFORMATION: SCORE 4
COTHER INFORMATION: Seq LLQELGLCMCLLS/AE
US-09-513-999C-4436
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         ; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-3836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pseudomonas aeruginosa
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Best Local Similarity 100.0
Matches 5; Conservative
                                                                                                                                         Conservative
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                                                                        Query Match
Best Local Similarity
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NAME/KEY: SIGNAL
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APPLICANT: Homburger et al.

TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REFERENCE: FILE Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 59078
LENGTH: 79
                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                           DB 4; Length 79;
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Patent No. 6525174
GENERAL INFORMATION:
APPLICANT: Young et al.
TITLE OF INVENTION: 207 Human Secreted Proteins
                                                                                                                                                                                                                                                     25.0%; Score 5; DB 4
100.0%; Pred. No. 1.6
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REPERENCE: P2007P1
CURRENT APPLICATION NUMBER: US/09/205,258
CURRENT FILING DATE: 1998-12-04
EARLIER PELING DATE: 1998-06-04
EARLIER PELING DATE: 1998-06-04
EARLIER PELING DATE: 1997-06-06
EARLIER FILING DATE: 1997-06-06
EARLIER FILING DATE: 1997-06-06
EARLIER FILING DATE: 1997-06-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/048,881
EARLIER FILING DATE: 1997-06-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/048,895
FILING DATE: 1997-06-06
APPLICATION NUMBER: 60/048,884
FILING DATE: 1997-06-06
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APPLICATION NUMBER: 60/048,900
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FILING DATE: 1997-06-06
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APPLICATION NUMBER: 60/049,019
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APPLICATION NUMBER: 60/048,971
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APPLICATION NUMBER: 60/048,964
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FILING DATE: 1997-06-06
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APPLICATION NUMBER: 60/048,892
                                                                                                                                                                          ; TYPE: PRT; ORGANISM: Drosophila melanogaster
US-09-270-767-59078
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Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                     13 LRRYG 17
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US-09-205-258-403
                                                                                                                                                                                                                                                           Query Match
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; LOCATION: (15)

OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-205-258-403
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100.0%; Pred. No. 1.6e+02;
ive 0; Mismatches 0; Indele
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Patent No. 6639063
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Johert, S.
APPLICANT: Gladano, J.Y.
TILE OF INVENITION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET: 054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/048,970
EARLIER FILING DATE: 1997-06-06
EARLIER PELLING DATE: 1997-06-06
EARLIER PELLING DATE: 1997-06-06
EARLIER FILING DATE: 1997-06-06
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/048,917
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/048,917
EARLIER PELLING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/048,917
EARLIER FILING DATE: 1997-06-06
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/048,897
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/048,897
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/048,897
EARLIER APPLICATION NUMBER: 60/048,962
EARLIER APPLICATION NUMBER: 60/048,962
EARLIER APPLICATION NUMBER: 60/048,963
EARLIER APPLICATION NUMBER: 60/048,963
EARLIER FILING DATE: 1997-06-06
EARLIER FILING DATE: 1998-07-12-18
EARLIER FILING DATE: 1998-07-13
EARLIER FILING DATE: 1998-07-13
EARLIER FILING DATE: 1998-07-13
EARLIER FILING DATE: 1998-07-13
EARLIER APPLICATION NUMBER: 60/048,657
EARLIER FILING DATE: 1998-07-13
EARLIER FILING DATE: 1998-07-13
EARLIER FILING DATE: 1998-07-13
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Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 ALGWR 11
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NAME/KEY: SITE
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PRIOR APPLICATION NUMBER: 09/378,547
PRIOR FILING DATE: 1999-08-20
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 4
LENGTH: 98
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ORGANISM: Artificial Sequence
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Best Local Similarity 100.
Matches 5; Conservative
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                                                                                                                                                                                                                                                       5; Conservative
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US-09-540-236-2144
                                                                                                                                           ORGANISM: Homo sapiens
US-09-652-345-4
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Best Local Similarity
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Best Local Similarity
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                                                                                                                                TYPE: PRT
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APPLICANT: Farb, David H
APPLICANT: Anseek, Shelley
APPLICANT: Jang, Ming-Kuei
APPLICANT: Jang, Ming-Kuei
APPLICANT: Jang, Ming-Kuei
TITLE OF INVENTION: EFFECT OF STEROIDS ON NMDA RECEPTORS DEPENDS ON SUBUNIT
TITLE OF INVENTION: COMPOSITION
FILE REFERENCE: 0146-2026
CURRENT APPLICATION NUMBER: US/09/652,345
CURRENT APPLICATION NUMBER: 201-09-04
PRIOR APPLICATION NUMBER: 60/151,802
PRIOR FILING DATE: 1999-08-31
                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: INNOGENETICS N.V.
TITLE OF INVENTION: Method for typing of HLA alleles.
FILE REPERENCE: PCT99.86.HLA
CURRENT APPLICATION NUMBER: US/09/673,809
CURRENT FILING DATE: 2000-10-20
FRIOR APPLICATION NUMBER: 98870088.6
FRIOR APPLICATION NUMBER: 98870088.6
FRIOR APPLICATION NUMBER: 98870088.6
FRIOR APPLICATION NUMBER: 98870088.6
SOFTWARE: PACENTIN Ver. 2.1
SEQ ID NO 25
LENGTH: 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 25, Application US/09673809 Patent No. 6528261
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                                                                                                                                                                                                                  OTHER INFORMATION: Xaa = Arg, Thr
                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Xaa = Ser, Thr
US-09-621-976-3972
                                                                                                                                                                                                                                                                            OTHER INFORMATION: Xaa = Asn, Thr
                                                                                                                                                                                                                                                                                                                                                                                                                                               5; Conservative
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, ORGANISM: Homo sapiens
US-09-673-809-25
                                                                                            ORGANISM: Homo sapiens
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Best Local Similarity
Matches 5; Conserv
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          SOFTWARE: Patent.pm
SEQ ID NO 3972
LENGTH: 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 SSWAL 8
                                                                                                                                                          LOCATION: -36..-1
NAME/KEY: UNSURE
LOCATION: 7
                                                                                                                                                                                                                                       NAME/KEY: UNSURE LOCATION: 24
                                                                                                                                     NAME/KEY: SIGNAL
                                                                                                                                                                                                                                                                                               NAME/KEY: UNSURE LOCATION: 30
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US-09-673-809-25
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                                                                           TYPE: PRT
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GENERAL INFORMATION:
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: GATY L. Breton et al.
APPLICANT: GATY L. BRETON ET ALL
TITLE OF INVENTION: NUCLEIC ACID AND THERAPEUTICS
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERENCE: 2709-2005-001
CURRENT APPLICATION NUMBER: US/09/540,236
CURRENT FILING DATE: 2000-04-04
SEQ ID NOS: 3840
SEQ ID NOS: 3840
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Sequence 1724, Application US/09710279

Sequence 1724, Application US/09710279

Jatent No. 6703492

Tathe No. 6703492

TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS

FILE REFERENCE: PU3480US

CURRENT APPLICATION NUMBER: US/09/710,279

CURRENT FILING DATE: 2000-11-09

PRIOR APPLICATION NUMBER: 60/164,258

PRIOR FILING DATE: 1999-11-09

NUMBER OF SEQ ID NOS: 4472

SOFTWARE: Patentin Ver. 2.1

LENGTH: 108
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
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25.0%; Score 5; DB 4; Length 98; 100.0%; Pred. No. 1.9e+02; tive 0; Mismatches 0; Indels
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100.0%; Pred. No. 2e+02;
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US-09-540-236-2144
; Sequence 2144, Application US/09540236
; Patent No. 6673910
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Gaps

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Sequence 2, Application US/09816248

Batent No. 675341

GENERAL INFORMATION

APPLICANT: BAUMANN, PETER

APPLICANT: CECH, THOMAS R.

TITLE OF INVENTION: PROTECTION-OF-TELOMERE-1 (POT-1) PROTEIN AND ENCODING

TITLE OF INVENTION: PROTECTION-OF-TELOMERE-1 (POT-1) PROTEIN AND ENCODING

TITLE OF INVENTION: PROTECTION OF PROTEIN AND ENCODING

TITLE OF INVENTION: 089491/0201

CURRENT APPLICATION NUMBER: US/09/816,248

CURRENT APPLICATION NUMBER: 2001-03-26

NUMBER OF SEQ ID NOS: 45

SOFTWARE: PATENTIN Ver. 2.1

SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 4; Length 119;
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. 2.2e+02;
ches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 106
COTHER INFORMATION: Xaa= * or Glu or Lys or Glu US-09-513-999C-5792
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100.0%; Pred. No. 2.2
ative 0; Mismatches
                                                                                                                                                                                                                                                            Query Match
25.0%; Score 5; DB 4
Best Local Similarity 100.0%; Pred. No. 2.3
Matches 5; Conservative 0; Mismatches
  CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 5890
LENGTH: 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 5792, Application US/09513999C; Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.00
Thes 5; Conservative
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SOFTWARE: Patent.pm
SEQ ID NO 5792
LENGTH: 119
                                                                                                                                           ORGANISM: Homo sapiens
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                               65 SSWAL 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90 VWSSW 94
                                                                                                                                                                                                     ; LOCATION: -48..-1
US-09-621-976-5890
                                                                                                                                                                                                                                                                                                                                        4 SSWAL 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 VWSSW 6
                                                                                                                                                                                NAME/KEY: SIGNAL
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                                                                                                                         TYPE: PRT
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5. 2.2e+02;
cches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Jobert, S. APPLICANT: Glordano, J.Y. TITLE OF INVENTION: EGYS and Encoded Human Proteins. FILE REFERENCE: GENSET. 054PR2; CURRENT APPLICATION NUMBER: US/09/621,976; CURRENT APPLICATION NUMBER: US/09/621,976; NUMBER OF SEQ ID NOS: 19335; SOFTWARE: Patent.pm ; SEQ ID NO 5186; LENGTH: 119
                                                                                                                                                                  GRUERAL NO. 9023023
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Dobert, S.
APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT APPLICATION NUMBER: US/09/621,976
NUMBER OF SEQ ID NOS: 19335
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APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S. S.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
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100.0%; Pred. No. 2.2
tive 0; Mismatches
                                                                                                                 US-09-621-976-7483; Sequence 7483, Application US/09621976; Patent No. 6639063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5186, Application US/09621976
Patent No. 663963
PERRAL INPORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 5890, Application US/09621976 Patent No. 6639063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 5; Conserv
                                  97 RYGWG 101
15 RYGWG 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 LRRYG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 QVWSS 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5 QVWSS 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-621-976-5186
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                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 7483
LENGTH: 113
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US-08-980-523-11
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Patent No. 6753411

GENERAL INFORMATION:
APPLICANT: BAUMANN, PETER
APPLICANT: ECH, THOMAS R.
TITLE OF INVENTION: PROTECTION-OF-TELOMERE-1 (POT-1) PROTEIN AND ENCODING
TITLE OF INVENTION: POLYNUCLEOTIDES
FILE REFERENCE: 089491/0201
CURRENT APPLICATION NUMBER: US/09/816,248
CURRENT FILING DATE: 2001-03-26
NUMBER OF SEQ ID NOS: 45
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 3
LENGTH: 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/09816248
Sequence 4, Application US/09816248
Patent NO. 6753411
GENERAL INFORMATION:
APPLICANT: EALWANN, PETER
APPLICANT: CECH, THOMAS R.
TITLE OF INVENTION: PROTECTION-OF-TELOMERE-1 (POT-1) PROTEIN AND ENCODING TITLE OF INVENTION: POLYNUCLEOTIDES FILE REPERENCE: 089491/0201
CURRENT APPLICATION NUMBER: US/09/816,248
CURRENT FILING DATE: 2001-03-26
NUMBER OF SEQ ID NOS: 45
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 4
ILENGTH: 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                     Gaps
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                                                                                                                                     0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25.0%; Score 5; DB 4; Length 123; 100.0%; Pred. No. 2.3e+02; Live 0; Mismatches 0; Indels
                                                                                            25.0%; Score 5; DB 4; Length 123; 100.0%; Pred. No. 2.3e+02; tive 0; Mismatches 0; Indels
                  ; TYPE: PRT
; ORGANISM: Stylonychia mytilis
US-09-816-248-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Oxytricha trifallax
US-09-816-248-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.'
Matches 5; Conservative
                                                                                          Query Match
Best Local Similarity 100.
Matches 5, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT ORGANISM: Oxytricha nova
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 5; Conserv
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US-09-816-248-4
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LENGTH: 123
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RESULT 64

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Sequence 3251, Application US/09540236;
Patent No. 6673910
GENERAL INFORMATION:
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA CATABBY TITLE OF INVENTION: NUCLEIC ACID AND THERAPEUTICS
TITLE OF INVENTION: POR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.2005-001
CURRENT APPLICATION NUMBER: US/09/540,236
CURRENT FILING DATE: 2000-04-04
SEQ ID NOS: 3840
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                                                                       APPLICANT: Kouhara, Haruhiko
APPLICANT: Spivak-Kroizman, Taly
APPLICANT: Spivak-Kroizman, Taly
APPLICANT: Schlessinger, Joseph
TITLE OF INVENTION: ADAPTOR PROTEIN FRS2 AND
TITLE OF INVENTION: RELATED PRODUCTS AND METHODS
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: FESTSEM: IBM P.C. DOS 5.0
SOFTWARE: FESTSEM: OF WINDOWS 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/980,523
FILING DATE: December 1, 1997
CLASSIFICATION 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US97/21851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                230/045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: December 1, 1997
APPLICATION NUMBER: 60/032,093
FILING DATE: December 3, 1996
ATTORNEY/AGENT INFORMATION:
; Sequence 11, Application US/08980523; Patent No. 6310181; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                   ADDRESSEE: Lyon & Lyon STREET: 633 West Fifth Street STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      32,327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Warburg, Richard J. REGISTRATION NUMBER: 32,3 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               129 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                                                                                                                                                                                                                                                                                CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: U.S.A. ZIP: 90071-2066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           52 LRRYG 56
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APPLICANT: (COUNTRIES OTHER THAN US) THE UNIVERSITY OF
APPLICANT: (SOUNTRIES OTHER THAN US) THE UNIVERSITY OF
APPLICANT: (SOUNTRIES OTHER TISSUE OF PLANTS
TITLE OF INVENTION: DEVELOPMENTAL REGULATION IN ANTHER TISSUE OF PLANTS
NUMBER OF SEQUENCES: 13
CORRESPONDENCES: 13
CONTRY: UNITED STATES OF AMERICA
COUNTRY: UNITED STATES OF AMERICA
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: DC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: AU PCT INTERNATIONAL
FILING DATE: 16-DEC-1993
APPLICATION NUMBER: AU PC4400
FILING DATE: 16-DEC-1993
APPLICATION NUMBER: AU PC4400
FILING DATE: 16-DEC-1993
APPLICATION NUMBER: AU PC4600
FILING DATE: 16-DEC-1993
APPLICATION NUMBER: AU PLAGAO
FILING DATE: 16-DEC-1993
APPLICATION NUMBER: AU PLAGAO
FILING DATE: 16-DEC-1993
APPLICATION NUMBER: AU PLAGAO
FILING DATE: 16-DEC-1993
ATTORNEY AGENT INFORMATION:
NAME: DIGIGALO, FRANK S
NAME: DIGIGALO, FRANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 32020, Application US/09270767

Patent No. 6703491

GENERAL INFORMATION:

APPLICANT: Homburger et al.

TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster:
FILE REFERENCE: File Reference: 7326-094

CURRENT APPLICANTION NUMBER: US/09/270,767

CURRENT FILING DATE: 1999-03-17

NUMBER OF SEQ ID NOS: 62517

SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 144;
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5. 2.6e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: + 1 516 742 4343
TELEFAX: + 1 516 742 4366
INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 : 137 amino acids
amino acid
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Best Local Similarity 100.
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
           Patent No. 6740748
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           119 SSWAL 123
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LENGTH: 144
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                                                                                                                                                                                   25.0%; Score 5; DB 4; Length 131; 100.0%; Pred. No. 2.4e+02; tive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: (countries other than US) THE UNIVERSITY APPLICANT: MELBOURNE APPLICANT: (US only) KNOX, RB; SINGH, MB; and XU, H. TITLE OF INVENTION: DEVELOPMENTAL REGULATION IN ANTHER TITLE OF INVENTION: 11SSUE OF PLANTS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: NEW TOKA

COUNTRY: UNITED STATES OF AMERICA
ZIP: 11530-0299
COMPUTER READABLE FORM:
MEDTUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,574
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/454,294
FILING DATE: 16-DEC-1993
APPLICATION NUMBER: AU PCT INTERNATIONAL
FILING DATE: 15-DEC-1993
APPLICATION NUMBER: 9338
APPLICATION NUMBER: AU PL6400
FILING DATE: 15-DEC-1993
APPLICATION NUMBER: BUGGLIO, FRANK S
APPLICATION NUMBER: AU PL6400
FILING DATE: 15-DEC-1993
APPLICATION NUMBER: AU PL6400
FILING DATE: 15-DEC-1993
APPLICATION NUMBER: BUGGLIO, FRANK S
APPLICATION NUMBER: AU PL6400
FILING DATE: 15-DEC-1993
APPLICATION NUMBER: AU PL6400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: SCULLY SCOTT MURPHY & PRESSER STREET: 400 GARDEN CITY PLAZA CITY: GARDEN CITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 4, Application US/08454294A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/09036574
Patent No. 6215045
GENERAL INFORMATION:
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TELEPHONE: + 1 516 742 4343
TELEFAX: + 1 516 742 4366
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                                                                                                                                                                               Query Match
Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity 100.
Matches 5; Conservative
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                                   ; TYPE: PRT; ORGANISM: M.catarrhalis
US-09-540-236-3251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
TOPOLOGY: linear
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US-08-454-294A-4
LENGTH: 131
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Length 168; 0; Indels

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Sequence 30988, Application US/09252991A

Patent No. 6551795
GENERAL INFORMATION:
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS;
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
PRIOR FILING DATE: 1998-07-27
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Patent No. 6551795
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: AREUGINCA ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AREUGINCA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: AREUGINCA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: AREUGINCA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION NUMBER: US/09/252,991A
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR PILING DATE: 1998-02-18
PRIOR PILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
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PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 20364
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                                                                                                                                                                            TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
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SEQ ID NO 30988
LENGTH: 168
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Matches 5; Conserv
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US-09-252-991A-32019
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US-09-252-991A-30988
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Ratent No. 6551795
GENERAL INFORMATION
ADPLICATION: MARC J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
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Sequence 27239, Application US/09252991A

Patent No. 6551795

GENERAL INFORMATION

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

CURRENT APPLICATION NUMBER: US/09/252,991A

CURRENT PAPLICATION NUMBER: US/09/252,991A

CURRENT PAPLICATION NUMBER: US/00/74,788

PRIOR FILING DATE: 1938-02-18

PRIOR FILING DATE: 1938-07-27

NUMBER OF SEQ ID NOS: 33142
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Patent No. 6703491

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION:
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767

CURRENT PILING DATE: 1999-03-17

NUMBER OF SEQ ID NOS: 62517

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 47237

LENGTH: 144
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100.0%; Pred. No. 2.6
:ive 0; Mismatches
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; ORGANISM: Drosophila melanogaster
US-09-270-767-47237
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Best Local Similarity 100...
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Best Local Similarity
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62 RWLRR 66
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                           62 RWLRR 66
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US-09-252-991A-27239
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US-09-270-767-47237
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LENGTH: 158
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Sequence 18579 Application US/09252991A
Sequence 18579 Application US/09252991A
Sequence 18579 Application US/09252991A
Sequence 18579 Application US/09252991A
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1999-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEG ID NO 18579
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Factor No. 6551795

GENERAL INFORMATION:
APPLICANT: MARC J. Rubenfield et al.
APPLICANT: MARC J. RUBENGE: L07196.136
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 20339
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25.0%; Score 5; DB 4; Length 169; 100.0%; Pred. No. 2.9e+02; Live 0; Mismatches 0; Indels
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ORGANISM: Pseudomonas aeruginosa
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Best Local Similarity 100.C
Matches 5, Conservative
Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
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Maximum DB seq length: 200000000
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Match Length DB
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164
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377
1437
                                  - protein search,
         Copyright
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1: pir1:*
2: pir2:*
3: pir3:*
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                                   OM protein
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                                                                                                                                                         Word size
                                                                                                   Sequence:
                                                                                                                                          Searched:
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Perfect
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255.0 255.0	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	255.0 255.0 255.0 255.0 255.0
	44444440000000000000000000000000000000	0.0000000000000000000000000000000000000

## ALIGNMENTS

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A;Residues: 1-352 <OKA>
A;Cross-references: UNIPROT:P20263; GB:S58426; NID:g235987; PIDN:AAB19896.1; PID:g235988
                                                            R,Rosner, M.H.; Vigano, M.A.; Ozato, K.; Timmons, P.M.; Poirier, F.; Rigby, P.W.J.; Stau Nature 345, 686-692, 1990
                                                                                                                         A, Title: A POU-domain transcription factor in early stem cells and germ cells of the mam A, Reference number: S10924; MUID:90294899; PMID:1972777
                                                                                                                                                                                                                                                                                                                                                                                                                                                        A,Molecule type: mRNA
A;Residues: 'M',30,'P',32-352 <SCH>
A;Residues: 'M',30,'P',32-352 <SCH>
A;Residues: 'M',30,'P',3224371
V;Cross-references: GB:X22437; NDI:953500; PIDN:CAA36682.1; PID:953501
C;Superfamily: transcription factor Oct-3; homeobox homology; POU domain homology
C;Reywords: alternative splicing, DNA binding; homeobox; nucleus; transcription regulati
F;138-205/Domain: POU domain homology <POU>
F;224-280/Domain: homeobox homology <HOX>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R,Okamoto, K.; Okazawa, H.; Okuda, A.; Sakai, M.; Muramatsu, M.; Hamada, H. Cell 60, 461-472, 1990
A;Title: A novel octamer binding transcription factor is differentially expressed in mous
A;Reference number: A34672; MUID:90150273; PMID:1967980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: mRN4
A; Residues: 1-377 < CKRA>
A; Residues: 1-377 < CKRA>
A; Residues: 1-377 < CKRA>
A; Cross-references: UnlyROT: P20263; GB: M34381; NID: g200117; PIDN: AAA39844.1; PID: g200118
A; Cross-references: UnlyROT: P20263; GB: M34381; NID: g200117; PIDN: AAA39844.1; PID: g200118
A; Note: the authors translated the codon GAT for residue 19 as Tyr
C; Superfamily: transcription factor Oct-3; homeobox homology; POU domain homology
C; Keywords: alternative splicing; DNA binding; homeobox; nucleus; transcription regulatic
F; 138-205/Domain: POU domain homology ...POU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         transcription factor Oct-3, long splice form - mouse
NyAlternate names: NF-A3; transcription factor Oct-4
C;Species: Mws musculus (house mouse)
C;Date: 13-Jul-1990 #sequence_revision 09-Oct-1992 #text_change 09-Jul-2004
C;Accession: A34672
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M polyprotein precursor - Germiston virus

N,contains: glycoprotein G1; glycoprotein G2; nonstructural protein NS-M

C,Species: Germiston virus

C,Bate: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 09-Jul-2004

C,Accession: S07430

R;Pardigon, N.; Vialat, P.; Gerbaud, S.; Girard, M.; Bouloy, M.
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A Molecule type: mRNA
A, Residues: 1-30, 'P. NA
A, Residues: 1-30, 'P. NA
A, Rischoeler, H.R.; Ruppert, S.; Suzuki, N.; Chowdhury, K.; Gruss, P.
Nature 344, 435-439, 1990
A, Tille: Naw type of POU domain in germ line-specific protein Oct-4.
A, Reference number: A34206; MUID:90206045; PMID:1690859
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100.0%; Pred. No. 13;
ive 0; Mismatches
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100.0%; Pred. No. 14;
tive 0; Mismatches
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polypeptide deformylase - Deinococcus radiodurans (strain R1)
C;Species: Deinococcus radiodurans
C;Decies: Deinococcus radiodurans
C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 09-Jul-2004
C;Accession: H75274
R;White, O.; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, R.J.;
M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, C.; Ma S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999.
                                                                                               C;Species: Thermus aquaticus (Itagment)
C;Species: Thermus aquaticus (Itagment)
C;Date: 25-Aug-1995 #sequence_revision 25-Aug-1995 #text_change 15-Mar-2004
C;Date: 25-Aug-1995 #sequence_revision 25-Aug-1995 #text_change 15-Mar-2004
C;Date: 25-Aug-1995 #sequence_revision 25-Aug-1995 #text_change 15-Mar-2004
C;Accession: A55228
A;Title: Characterization of the Thermus thermophilus locus encoding peptide deformylase
A;Accession: A55228
A;Reference number: A55228
A;Accession: A55228
A;Accession: A55228
A;Accession: DAA
A;Molecule type: DNA
A;Molecule type: DNA
A;References: GB:X79087; NID:g602912; PIDN:CAA55695.1; PID:g602914
C;Superfamily: peptide deformylase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Transcription factor Oct-3, short splice form - mouse
NyAlternate names: NF-A3; transcription factor Oct-4
()Species: Mus musculus (house mouse)
C,Species: Mus musculus (house mouse)
C,Accession: 817313; 810924; A34206
R,Okazawa, H.; Okamoto, K.; Ishino, F.; Ishino-Kaneko, T.; Takeda, S.; Toyoda, Y.; Muram A;Title: The Oct3 gene, a gene for an embryonic transcription factor, is controlled by a A;Reference number: 817313; MUID:92007744; PMID:1915274
A;Accession: 817313
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A;Experimental source: strain R1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, C.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
A; Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans R1.
A; Reference number: A;5250; MUID:20036896; PMID:10567266
A;Scassion: H75274
A;Status: preliminary
A;Scatus: Draliminary
A;Residues: 1-232 <WHI>
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100.0%; Pred. No. 8.1
:ive 0; Mismatches
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100.0%; Pre
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Best Loc Matches

RESULT PQ0341

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C;Species: Methanobacterium thermoautotrophicum
C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 09-Jul-2004
C;Accession: F69219
R;Smith, D.R.; Doucette-Stamm, L.A.; Deloughery, C.; Lee, H.; Dubois, J.; Aldredge, T.; F.; Qiu, D.; Spadafora, R.; Vicaire, R.; Wang, Y.; Wierzbowski, J.; Gibson, R.; Jiwani, N.; Xiu, D.; Spadafora, R.; Mao, J.; Rice, P.; Noelling, J.; Reeve, J.N.
J. Bacteriol. 179, 7135-7155, 1997
A;Tile: Complete genome sequence of Methanobacterium thermoautotrophicum Delta H: funct; A;Reesence number: A69000; MUID:98037514; PMID:9371463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CiSpecies: Xylella fastidiosa
CiDate: 18-Mug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
CiDate: 18-Mug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
Rianonymous, The Xylella fastidiosa Consortium of the Organization for Nucleotide Sequence Nature 406, 151-157, 2000
A) Fithe: The genome sequence of the plant pathogen Xylella fastidiosa.
A) Richerence number: A05515; MUID: 20365177; PMID: 10910347
A) Note: for a complete list of authors see reference number A59328 below
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         conserved hypothetical protein MTH895 - Methanobacterium thermoautotrophicum (strain Delt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPROT:026981; GB:AE000865; GB:AE000666; NID:g2621984; PIDN:AAB85393
A;Experimental source: strain Delta H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: UNIPROT:Q9XW29; EMBL:AL034392; PIDN:CAA22304.1; CESP:Y40BlA.1
A;Experimental source: clone Y40BlA
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                                                                                                                            hypothetical protein Y40BlA.1 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Aate: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T26778
R;Harris, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                            submitted to the EMBL Data Library, December 1998
A;Reference number: 220264
A;Accession: T26778
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-75 < WIL>
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100.0%; Pred. No. 56;
ative 0; Mismatches
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100.0%; Pred. No. 54;
tive 0; Mismatches
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Best Local Similarity
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PRGAP 25
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A;Introns: 61/3
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21
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C;Species: rabies virus
C;Species: rabies virus
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C;Accession: PQ0363
C;
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C;Species: rables virus
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C;Accession: PQ0341
C;Accession: PQ0341
R;Sacramento, D.; Badrane, H.; Bourhy, H.; Tordo, N.
J. Gen. Virol. 73, 1149-1158, 1992
A;Title: Molecular epidemiology of rabies virus in France: Comparison with vaccine strai
A;Accession: PQ0341
                                    M gd
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C;Superfamily: bunyavirus M polyprotein
C;Superfamily: bunyavirus M polyprotein; polyprotein; transmembrane protein
C;Keywords alycoprotein; nonstructural protein; polyprotein; transmembrane protein
F;1-21/Domain: signal sequence #status predicted <NPP>
F;22-1437/Product: M polyprotein #status predicted <MPP>
F;1382-1412/Domain: transmembrane #status predicted <TMM>
F;65,88,252,474,627,897,1173/Binding site: carbohydrate (Asn) (covalent) #status predict
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A,Residues: 1-34 <SAC>
A,Residues: 1-34 <SAC>
A,Notes-references: UNIPROT:Q9IPJ5
A,Note: this sequence was obtained from isolates: WR56, WR06, WR39, WR97, WR18, WR63, C;Superfamily: rhabdovirus L protein
                                A,Title: Nucleotide sequence of the M segment of Germiston virus: comparison of the A,Reference number: 807430; MUID:89021381; PMID:3176688
A,Accession: 807430
A,Molecule type: genomic RNA
A,Residues: 1-1437 <PAR>
A,Cross-references: UNIPROT:P12430; EMBL:M21951
C,Genetics:
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100.0%; Pred. No. 29;
Live 0; Mismatches
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C;Superfamily: rhabdovirus L protein
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Best Local Similarity
Matches 5; Conserv
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A; Molecule type: mRNA
A; Residues: 1-34 <SAC>
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A;Accession: T08372
A;Status: translated from GB/EMBL/DDBJ
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A;Gene: trxA; HALOSP:H0606
A;Genome: plasmid pNRC100
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A; Genome: plasmid pNRC100
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Matches 5; Conserv
                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-119 < DAS>
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Best Local Similarity
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A;Status: preliminary
A;Status: preliminary
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-99 < SIM>
A;Residues: 1-99 < SIM>
A;Residues: 1-99 < SIM>
A;Cross-references: UNIPROT: O9PA09; GB:AE004077; GB:AE003849; NID:g9107952; PIDN:AAP8556
A;Experimental source: strain 9a5c
R;Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; A
Briones, M.R.S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, B
as.Neto, B.; Docena, C.; Bl-Dorry, H.; Facincani, A.P.; Franca, S.C.; Franco, D.M.; Carrer, Galach, M.A.; Remper, E.L.; Kitajima, J.P.; Krieger, J.E.; Kuramae, E.E.; Laigr chado, M.A.; Madeira, M.N.; Madeira, H.M.F.; Marino, C.L.; Marques, M.C.; Frando, M.A.; Madeira, A.M.B.N.; Matoukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.; F.G.; Numes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A. Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.B.; de Sa, R.G.; Santelli, R.V.; Savasak A;Authors: analada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z
A;Reference number: A59328
A;Contents: annotation
C;Genetics:
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N/Alternate names: hypothetical protein H0606; hypothetical protein H1757
C;Species: Halobacterium sp.
A;Variety: strain NRC-1
C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004
C;Accession: T08371; P08372
C;Accession: T08372
R;NG, W.V.; Ciufo, S.A.; Smith, T.M.; Bumgarner, R.E.; Baskin, D.; Faust, J.; Hall, B.; Genome Res. 8, 1131-1141, 1998
A;Title: Snapshot of a large dynamic replicon in a halophilic Archaeon: megaplasmid or 1 A;Accession: T08271
A;Accession: T08271
A;Status: translated from GB/EMBL/DDBJ
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C;Species: Chlorella virus PBCV-1
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T17913
R;Graves, M.V.; Van Etten, J.L.
Submitted to the EMBL Data Library, May 1999
A;Reference number: Z18806
A;Accession: T17913
A;Accession: T17913
A;Accession: T17913
A;Accession: T17913
A;Accession: T17913
A;Cross-references: UNIPROT:Q98462; EMBL:U42580; NID:G4028896; PIDN:AAC96778.1
A;Experimental source: specific host Chlorella strain NC64
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. 74;
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100.0%; Pred. No. 68;
ive 0; Mismatches
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100.0%; Pred. No. 74;
iive 0; Mismatches
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Best Local Similarity 100.(
Matches 5; Conservative
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Note: A410L
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A.Cross-references: UNIPROT:046709; EMBL:AF016485; NID:g2822278; FID:g2822332; HALOSP:HO A;Genetics: COP1
A;Genetics: COP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Function:
A;Description: involved in reduction of ribonucleotides, methionine sulfoxide sulfate, a
C;Superfamily: thioredoxin; thioredoxin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; Takah awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; K DNA Res. 6, 83-101, 1999
A;Hitle: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Aeropyr A;Reference number: A72450; MUID:99310339; PMID:10382966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Residues: 1-123 <KAW>
A;Cross_references: UNIPROT:Q9YAM7; DDBJ:AP000062; NID:g5105244; PIDN:BAA80921.1; PID:d1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C'Species: Mis musculus (house mouse)
C'Species: Mis musculus (house mouse)
C'Date: 2.1Nov-1993 #sequence_revision 24-May-1996 #text_change 18-Jun-1999
C'Accession: 312372; 86397
R'Tomasetto, C.; Rio, M.C.; Gautier, C.; Wolf, C.; Hareuveni, M.; Chambon, P.; Lathe, R. RRBO J. 9, 407-414, 1990
A;Title: bby, the domain-duplicated homolog of pS2 protein, is co-expressed with pS2 in A;Reference number: $12371; MUID:90151615; PMID:2303034
A;Accession: $12372
A;Molecule type: mRNA
A;Residues: 1-128 <TOM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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A;Experimental source: strain NRC-1
A;Genetics: COP2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Species: Aeropyrum pernix
C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jul-2004
C;Accession: D72579
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.81;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 100.0%; Score 5; DB 2 Similarity 100.0%; Pred. No. 79; 5; Conservative 0; Mismatches
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100.0%; Pred. No. 81;
iive 0; Mismatches
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A;Cross-references: UNIPROT;O9PFY2; GB:ABC003900; GB:ABC003849; NID:g9105366; PIDN:AAFB333; A;Cross-references: UNIPROT;O9PFY2; GB:ABC003900; GB:ABC003849; NID:g9105366; PIDN:AAFB333; A;Experimental source: strain 9a5c
R;Simpson, A.J.G.; Reinach, F.C.; Arruda, P.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, H. Briones, M.R.S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, H. Briones, M.R.S.; Ferroro, D.M.; Carraro, D.M.; Carraro, D.M.; Carrer, M.J.; Kemper, J.D.; Frommed, A;Authors: Ferreira, V.C.A.; Ferro, J.A.; Fragima, J.B.; Krieger, J.E.; Kuramae, E.E.; Laigre Chado, M.A.; Madeira, A.M.B.M.; Madeira, H.M.F.; Martino, C.L.; Marques, M.V.; Martins, E. A;Authors: M.V.; Markins, E. M.Y.; Matsuka, A.Y.; Menck, C.E., M.Y.; Marcaca, B.C.; Palmieri, D.A.; Folyuches, V.; Rosa, A.J.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasaki, A;Authors: a Silva, A.C.R.; da Silva, A.M.; Silva Jr., W.A.; da Silvaira, M.J.; Tsuhako, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z. A; Reference number: A59328
                                                                                                                                                                                                                                                                                                                                                                                                   hypothetical protein XF0524 [imported] - Xylella fastidiosa (strain 9a5c)
C;Species: Xylella fastidiosa
C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
C;Accession: G82796
R;Anonymous, The Xylella fastidiosa Consortium of the Organization for Nucleotide Sequence Nature 406, 151-157, 2000
A;Fitle: The genome sequence of the plant pathogen Xylella fastidiosa.
A;Feference number: A82515; MID:20365717; PMID:10910347
A;Note: for a complete list of authors see reference number A59328 below
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hypothetical protein lin1705 [imported] - Listeria innocua (strain Clip11262)
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A; Experimental source: strain Bristol N2; clone F16G10
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100.0%; Pred. No. 91;
iive 0; Mismatches
                                                                                                                                          Query Match 25.0%; Score 5; DB 2
Best Local Similarity 100.0%; Pred. No. 90;
Matches 5; Conservative 0; Mismatches
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                                                                              A;Map position: 2
A;Introns: 12/1; 31/1; 75/3
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Best Local Similarity
Matches 5; Conserv
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A, Status: preliminary
A, Molecule type: DNA
A, Residues: 1-142 <SIM>
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                           C; Genetics:
A; Gene: CESP: F16G10.7
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     spasmolytic polypeptide - rat
c;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Species: no csp-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Accession: 153637
R;Jeffrey, G.P.; Oates, P.S.; Wang, T.C.; Babyatsky, M.W.; Brand, S.J.
Gastroenterology 106, 336-345, 1994
A;Title: Spasmolytic polypeptide: a trefoil peptide secreted by rat gastric mucous cells
A;Reference number: 153637, MulD:94131228; PMID:8299900
A;Recession: 153637
A;Cess-references: Uniprofic profice from GB/EMBL/DDBJ
A;Residues: 1-129 <RES>
A;Cross-references: Uniprofic profein; trefoil homology
F;31-72/Domain: trefoil homology <TRF1>
F;81-121/Domain: trefoil homology <TRF2>
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C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 09-Jul-2004
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R;Gattung, S.; Scheet, P.
submitted to the EMBL Data Library, July 1998
A;Description: The sequence of C. elegans cosmid F16G10.
A;Reference number: Z21329
A;Accession: T33359
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Best Local Similarity 100.0%; Pred. No. 84;
Matches 5; Conservative 0; Mismatches
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Matches 5; Conservative
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probable N-acetyltransferase (AF232919) [imported] - Agrobacterium tumefaciens (strain C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A, Status: preliminary
A, Molecule type: DNA
A, Residues: 1-164 < KKIR>
A, Residues: Teferences: UNIPROT: QBUIE4; GB: AE007869; PIDN: AAK86170.1; PID: g15155263; GSPDB: G
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C;Species: Agrobacterium tumefaciens
C;Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 09-Jul-2004
C;Accession: Al2619
R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; Chen, L.; Wood, G.E.; Chen, Y.; Woo, L.; Karp, P.; Romero, P.; Zhang, S.
Karp, P.; Romero, P.; Zhang, S.
Science 294, 2317-2323, 2001
A;Authors: Yoo, H.; Tao, Y.; Biddle, P.; Jung, M.; Krespan, W.; Perry, M.; Gordon-Kamm,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: UNIPROT:Q8UIE4; GB:AE008688; PIDN:AAL41375.1; PID:g17738691; GSPDB:GA;Experimental source: strain C58 (Dupont)
C;Genetics:
A;Gene: Atu0353
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A,Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens C58.
A,Reference number: AB2577; MUID:21608550; PMID:11743193
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100.0%; Pred. No. 16+02;
Live 0; Mismatches 0; Indels
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25.0%; Score 5; DB 2; Len
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 5; Conservative 0; Mismatches 0;
                             Mismatches
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                             Conservative
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Best Local Similarity 100.
Matches 5; Conservative
                                                                                                                                                                                   133 OMLET 137
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                                                                                                        13 QMLET 17
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A;Gene: AGR C_619
                             5;
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C;Species: Listeria innocua
C;Species: Listeria innocua
C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004
C;Accession: AD1594
R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bloecker
C; Dominguez-Bernal, G.; Duchaud, B.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, H.
D; Jones, L.M.; Karst, U.
C; Jones, L.M.; Karst, U.
Science 294, 849-852, 2001
A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitcurnam, A.; Macheros: Kreft, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, A;Refence number: AB1077; MUID:21537279; PMID:11679669
A;Accession: AD1594
A;Status: preliminary
A;Molecule type: DNA
A;Kesidues: 1-148 cGIA,
A;Cross-references: UNIPROT:Q92C98; GB:AL592022; PIDN:CAC96524.1; PID:g16413766; GSPDB:GCGGenetics:
C;Genetics:
A;Genetics:
A;Ge
A.Status: preliminary
A.Molecule type: DNA
A.Molecule type: DNA
A.Molecule type: DNA
A.Cross-references: UNIPROT:092B45; GB:AL592022; PIDN:CAC96936.1; PID:g16414192; GSPDB:CASPERIMENTAL SOURCE: Strain Clip11262
C.Genetics:
A.Gene: lin1705
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                                                                                                                                                                                                                                                                                                                                         Length 148;
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5. 94;
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100.0%; Pred. No. ...
... 0; Mismatches
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100.0%; Pred. No. 94;
:ive 0; Mismatches
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Best Local Similarity 100.0%
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Best Local Similarity
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A; Gene: VC0046

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polypeptide deformylase [imported] - Caulobacter crescentus
C;Species: Caulobacter crescentus
C;Species: Caulobacter crescentus
C;Date: 20.Apr-2001 #sequence_revision 20-Apr-2001 #text_change 09-Jul-2004
C;Accession: G87282
R;Nierman, W.C.; Feldblyum, T.V.; Paulsen, I.T.; Nelson, K.E.; Eisen, J.; Heidelberg, J.R.B.; Laub, M.T.; DeBoy, R.T.; Dodson, R.J.; Durkin, A.S.; Gwinn, M.L.; Haft, D.H.; Kolone
n, J.; Ernolaeva, M.; White, O.; Salzberg, S.L.; Shapiro, L.; Venter, J.C.; Fraser, C.M.
Proc. Natl. Acad. Sci. U.S.A. 98, 4136-4141, 2001
A;Title: Complete Genome Sequence of Caulobacter crescentus.
A;Reference number: A87249; MUID:21173698; PMID:11259647
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A;Cross-references: UNIPROT:Q9ABF5; GB:AE005673; NID:g13421407; PIDN:AAK22259.1; GSPDB:GN
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A;Experimental source: strain Madrid B
                                                A;Status: preliminary
A;Molecule type: DWA
A;Molecule type: DWA
A;Residues: 1-170 < KUR>
A;Actoss-references: UNIPROT:Q8UID1; GB:AE007869; PIDN:AAK86183.1; PID:g15155278; GSPDB:GR
C;Genetics:
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C;Species: Rickettsia prowazekii
C;Date: 21-Nov-1998 #sequence_revision 21-Nov-1998 #text_change 09-Jul-2004
C;Accession: B71732
R;Andersson, S.G.E.; Zomorodipour, A.; Andersson, J.O.; Sicheritz-Ponten, T.; Alsmark, Nature 396, 133-140, 1998
A;Title: The genome sequence of Rickettsia prowazekii and the origin of mitochondria. A;Reference number: A71630; MUD:99039499; PMID:9823893
A;Accession: B71732
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
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Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 5; Conservative 0; Mismatches 0;
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25.0%; Score 5; DB 2
Best Local Similarity 100.0%; Pred. No. 1.1
Matches 5; Conservative 0; Mismatches
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A,Map position: circular chromosome
C,Superfamily: peptide deformylase
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A,Gene: def; RP208
C,Superfamily: peptide deformylase
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A,Gene: CC0272
C;Superfamily: peptide deformylase
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Best Local Similarity 100.
"--a 5; Conservative
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A; Residues: 1-175 < AND>
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             A; Accession: F97403
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C; Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
C; Accession: A82373
R; Heidelberg, J. Elsen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; Dodson, R.J.; chardson, D.; Ermolaeva, M.D.; Vamathevan, J.; Bass, S.; Qin, H.; Dragoi, I.; Sellers, F. Nature 406, 477-483, 2000
A; Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae.
A; Reference number: A82035; MUID:20406833; PMID:10952301
A; Accession: A82333
A; Accession: A82333
A; Residue: preliminary
A; Molecule type: DNA
A; Residues: 1-169 < HEI>
A; Residues: 1-169 < HEI>
A; Residues: 1-169 < HEI>
A; Experimental source: serogroup O1; strain N16961; biotype E1 Tor
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A;Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrobacterium tum A;Reference number: A97359; MUID:21608551; PMID:11743194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polypeptide deformylase def [imported] - Agrobacterium tumefaciens (strain C58, Dupont) (Species: Agrobacterium tumefaciens (Species: Agrobacterium tumefaciens (Species: Agrobacterium tumefaciens (C; Species: Agrobacterium tumefaciens (C; Species: AF2621 (Species: AF2621 (AF2621 
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A; Residues: 1-170 <KUR>
A; Cross-references: UNIPROT: OBUID1; GB: AE008688; PIDN: AAL41388.1; PID:g17738706; GSPDB:GA; Experimental source: strain C58 (Dupont)
C; Genetics:
A; Gene: def
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C;Species: Agrobacterium tumefaciens
C;Date: 30-Sep-2001 #sequence_revision 30-Sep-2001 #text_change 09-Jul-2004
C;Accession: F97403
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A,Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens C58.
A,Reference number: AB2577; MUID:21608550; PMID:11743193
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C,Superfamily: peptide deformylase
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Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity
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Matches

RESULT 25

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A; Molecule type: genomic RNA
A; Residues: 1-195 < IMAL>
A; Residues: 1-195 < IMAL>
A; Cross-references: UNIPROT: P25883; GB:D90192; GB:M58303; NID:g221695; PIDN: BAA14216.1;
A; Experimental source: isolate Japanese S-1
R; Imazeki, F.; Omata, M.; Ohto, M.
Nucleic Acids Res. 19, 5439, 1991
A; Title: Complete nucleotide sequence of hepatitis delta virus RNA in Japan.
A; Reference number: S18678; MUID:92020244; PMID:1923832
A; Accession: S18678
                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPROT:P25881; GB:D90190; GB:M58299; NID:g221691; PIDN:BAA14214.1; CS:Superfamily: hepatitis delta Virus large antigen C;Reywords: core protein F;2-195/Product: delta large antigen #status predicted <MAT>
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A.Rolecule type: genomic RNA.
A.Cross-references: EMBL.X60193; NID:g59497; PIDN:CAA42749.1; PID:g59498
A.Experimental source: isolate Japanese S-1
A.Note: note this sequence was submitted to the EMBL Data Library, June 1991
C.Superfamily: hepatitis delta virus large antigen
C.Keywords: core protein
F;2-195/Product: delta large antigen #status predicted <MAT>
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Cispecies: hepatitis delta virus
Rimazeki, F.; Omata, M.; Ohto, M.
J. Virol. 64, 5594-5599, 1990
A;ritle: Heterogeneity and evolution rates of delta virus RNA sequences.
A;Reference number: A36409; MUID:91012805; PMID:2214027
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C;Species: Vigna radiata (mung bean)
C;Species: Vigna radiata (mung bean)
C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 09-Jul-2004
C;Accession: T10941
R;Yamamoto, K.
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                                    R'Imazeki, F.; Omata, M.; Ohto, M.
Vizol. 64, 55295, 1390
A;Title: Heterogeneity and evolution rates of delta virus RNA sequences.
A;Reference number: A36409; MUID:91012805; PMID:2214027
A;Accession: A36409
A;Molecule type: genomic RNA
A;Residues: I-195 < IMA>
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A;Reference number: 217206
A;Accession: 10941
A;Status: preliminary; translated from GB/EMBL/DDBJ
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100.0%; Pred. No. 1.2
ative 0; Mismatches
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Best Local Similarity 100.4
Matches 5, Conservative
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Matches 5; Conservative
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        C; Accession: A36409
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A; Title: Structural Characterization of the early indoleacetic acid-inducible genes, Ps. A; Reference number: S39075; MUID:94016594; PMID:8411182
A; Reference number: S39075; MUID:94016594; PMID:8411182
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-189 < OEL.>
A; Cross-references: UNIPROT: P49679; EMBL:X68216
A; Experimental source: var. Alaska
A; Residues: preliminary
A; Molecule type: mRNA
A; Residues: preliminary
A; Molecule type: mRNA
A; Residues: 1-189 < OEW.>
A; Cross-references: EMBL:X68215; NID:9414180; PIDN:CAA48297.1; PID:9414181
A; Experimental source: var. Alaska
C; Genetics:
A; Gene: IAA4/5
A; I132/1; 165/2
C; Superfamily: auxin-induced protein aux28
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Cipecies: How sapiens (man)
Cipate: 13-Jan-1996 #sequence_revision 01-Mar-1996 #text_change 09-Jul-2004
Cipates: 12-July 1995
Aircessories: 158124
Aircessories: 12-July 1995
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Date: 07-Oct-1994 #sequence_revision 01-Dec-1995 #text_change 09-Jul-2004;Accession: S39075; S39077
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NjAlternate names: HD3q
C;Species: hepatitis delta virus
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 09-Jul-2004
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ches 0; Indels
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100.0%; Pred. No. 1.1
iive 0; Mismatches
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Best Local Similarity 100.0
Matches 5; Conservative
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Best Local Similarity 100.
Matches 5; Conservative
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14 MLETM 18
                                                                     35 MLETM 39
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C.Species: Neisseria meningitidis
C.Species: Neisseria meningitidis
C.Species: Neisseria meningitidis
C.Species: Noisseria meningitidis
C.Date: 05-May-2000 #sequence_revision 05-May-2000 #text_change 09-Jul-2004
C.Accession: A81959
S.Parkhill, J. Achtman, M.; James, K.D.; Bentley, S.D.; Churcher, C.; Klee, S.R.; Morell
; Holroyd, S.; Jagels, K.; Leather, S.; Moule, S.; Mungall, K.; Quail, M.A.; Rajandream,
Nature 404, S.02-506, 2000
A,Title: Complete DNA sequence of a serogroup A strain of Neisseria menigitidis Z2491.
A,Reference number: A81775; MUID:20222556; PMID:10761919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Status: preliminary
A;Nolecule type: DDA
A;Nolecule type: DDA
A;Residues: 1-220 < PAR>
A;Residues: 1-220 < PAR>
A;Cross-references: UNIPROT:Q9JWE2; GB:AL162753; GB:AL157959; NID:g7379120; PIDN:CAB83721
A;Experimental source: serogroup A, strain 22491
C;Genetics:
A;Gene: NMA0422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Residues: 1-220 - TET>
A;Cross-references: UNIPROT:Q9JXJO; GB:AE002552; GB:AE002098; NID:g7227279; PIDN:AAF42343
A;Experimental source: serogroup B, strain MC58
C;Genetics:
                                                             conserved hypothetical protein NMB2018 [imported] - Neisseria meningitidis (strain MC58 & C;Species: Neisseria meningitidis
C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 09-Jul-2004
                                                                                                                                                   CiAccession: E81014
R; Tettelin, H; Saunders, N.J.; Heidelberg, J; Jeffries, A.C.; Nelson, K.E.; Eisen, J.A.
Hickey, E.K.; Haft, D.H.; Salzberg, S.L.; White, O.; Fleischmann, R.D.; Dougherty, B.A.;
Ti, H; Qin, H.; Vamathevan, J; Gill, J; Scarlato, V; Masignani, V.; Fizza, M.
Science 287, 1809-1815, 2000
A; Authors: Grandi, G; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Ver
A; Title: Complete genome sequence of Neisseria meningitidis serogroup B strain MC58.
A; Reference number: A81000; MUID:20175755; PMID:10710307
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C,Species: Stellaria longipes (long-stalked stitchwort)
C,Species: Og-Jun-1994 #sequence_revision 12-May-1995 #text_change 09-Jul-2004
C,Accession: S33204
R,Zhang, X.H.
submitted to the EMBL Data Library, April 1993
A,Reference number: S33204
A,Accession: S33204
A,Accession: S3204
A,Accession: Syalahaniary
A,Molecule type: mRNA
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Best Local Similarity 100.0
Matches 5; Conservative
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Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                       A; Accession: E81014
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C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C;Accession: 146688
R;White, R.V.; Kaufman, K.M.; Letson, C.S.; Platteborze, P.L.; Sodetz, J.M.
A;Rule: Characterization of rabbit complement component C8: Functional evidence for the A;Reference number: 146686; MUID:94179833; PMID:7510745
A;Accession: 146688
A;Accession: 146688
A;Ataus: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-202 <MII>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hypothetical protein PA4535 [imported] - Pseudomonas aeruginosa (strain PAO1)
C;Species: Pseudomonas aeruginosa
C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 09-Jul-2004
C;Accession: C83079
C;Accession: C83079
R;Grover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, M.J.; Bradman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.; Lim, Jury, S.; Olson, M.V.
Nature 406, 959-964, 2000
A;Initle: Complete genome sequence of Pseudomonas aeruginosa PA01, an opportunistic pathor, A;Reference number: A82950; MUID:20437337; PMID:10984043
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Aistatus: preliminary
Aimoleoule type: DNA
Aistatus: 1-209 - STO>
Aicross-references: UNIPROT:Q9HVP2; GB:AE004867; GB:AE004091; NID:g9950769; PIDN:AAG0792
Aistperimental source: strain PAO1
Aigenetics:
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C;Superfamily: lipocalin; lipocalin homology
F;42-188/Domain: lipocalin homology <LIP>
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                                                                                                                                                                                                                          25.0%; Score 5; DB 2; Length 196; 100.0%; Pred. No. 1.2e+02; rive 0; Mismatches 0; Indels
A;Molecule type: mRNA
A;Residues: 1-196 cYAA,
A;Cross-references: UNIPROT:P32294; EMBL:D14413
A;Experimental source: hypocotyl
                                                                                                              C;Genetics:
A;Gene: arg4
C;Superfamily: auxin-induced protein aux28
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Best Local Similarity
Matches 5; Conserv
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Matches
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R,Goodner, B.; Hinkle, G.; Gattung, S.; Miller, N.; Blanchard, M.; Qurollo, B.; Goldman, A.; Liu, F.; Wollam, C.; Allinger, M.; Doughty, D.; Scott, C.; Lappas, C.; Markelz, B.; Science 294, 2323-2328, 201
A,Filtle: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrobacterium tum A;Reference number: A97359; MUID:21608551; PMID:11743194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A,Status: preliminary
A,Molecule type: DNA
A;Residues: 1-254 <KUR>
A;Cross-references: UNIPROT:Q8U9Pl; GB:AE007870; PIDN:AAK89717.1; PID:g15159631; GSPDB:G
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C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 09-Jul-2004
C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 09-Jul-2004
C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 09-Jul-2004
E;Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; Hirar Nucleic Acids Res. 28, 4317-4331, 2000
A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and A;Reference number: A83650; MUID:20512582; PMID:11058132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A,Residues: 1-258 <STO>
A,Cross-references: UNIPROT:Q9KA50, GB:AP001515, GB:BA000004, NID:g10174886, PIDN:BAB061.
A,Experimental source: strain C-125
C,Genetics:
A,Gene: fliR
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C;Species: Neisseria meningitidis
C;Date: 05-May_2000 #sequence_revision 05-May-2000 #text_change 09-Jul-2004
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C;Superfamily: type II thioesterase, NRPS/PKS/S-FAS type; oleoyl-[acyl-carrier-protein]
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C;Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 12-Jul-2004
                       Gaps
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                    Indels
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Best Local Similarity
Matches 5; Conserv
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S18997

hemagglutinin associated protein VCA0447 [imported] - Vibrio cholerae (strain N16961 ser C, Species: Vibrio cholerae

C, Species: Vibrio cholerae

C, Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004

C, Accession: S18997, H82460

R, Van Dongen, W.M.A.M., Van Vlerken, M.M.A.; de Graaf, F.K.

Submitted to the EMBL Data Library, September 1991

A, Description: Nucleotide sequence of a DNA fragment encoding a Vibrio cholerae haemaggl.
A, Recession: S18996

A, Status: preliminary

A, Residues: 1-230 «VAN»

A, Residues: 1-230 «VAN»

A, Residues: 1-230 «VAN»

A, Residues: UNIPROT: Q56638; EMBL: X64387; NID: 948355; PIDN: CAA45727.1; PID: 948357

C, Coss-references: UNIPROT: Q56638; EMBL: X64387; NID: 948355; PIDN: CAA45727.1; PID: 948357

C, Ritaidelberg, U.F.; Elsen, J.A.; Nalson, W.C.; Clayton, R.A.; Gwinn, M.L.; Dodson, R.J.; Chardson, D.: Ermolaeva, M.D.; Venter, J.C.; Fraser, C.M.

Nature 406, 477-483, 2000

A; Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae.

A; Reference number: A82035; MUID: 20406833; PMID: 10552301

A, Reference number: A82035.
                                                                                                                                                                                                                                                                                                                                                            RESULT 38
837734
67970-feetical protein - Vibrio cholerae
C;Species: Vibrio cholerae
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 09-Jul-2004
C;Accession: 837734
C;Accession: 837734
Infect. Immun. 61, 3032-3037, 1993
A;Title: Nucleotide sequence encoding the mannose-fucose-resistant hemagglutinin of Vibra A;Reference number: 837730; MUID:93293328; PMID:8514410
A;Accession: 837734
A;Accession: 837734
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-230 <FRA>
A;Cross-references: UNIPROT:Q56638; EMBL:X64097
C;Superfamily: type II site-specific DNA-methyltransferase
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A.Experimental source: serogroup O1; strain N16961; biotype El Tor
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                                                                                                                                                                                  Gaps
A;Residues: 1-222 <ZHA>
A;Cross-references: UNIPROT:Q41348; BMBL:X71601; NID:g297175; PID:g297176
C;Superfamily: hypothetical protein H11647
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                                                                                                                    DB 2; Length 222; . 1.3e+02; ches 0; Indels
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100.0%; Pred. No. 1.3e+02;
iive 0; Mismatches 0;
                                                                                                              Query Match 25.0%; Score 5; DB 2 Best Local Similarity 100.0%; Pred. No. 1.3 Matches 5; Conservative 0; Mismatches
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Best Local Similarity 100...
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Best Local Similarity
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                                                                                                                                                                                                                                                                                  54 PRGAP 58
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A,Map position: 2
C,Superfamily: typ
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Glycosyl transferase E (EC 2.4...) - Neisseria meningitidis
Glycosyl transferase E (EC 2.4...) - Neisseria meningitidis
Glycosyl transferase E (EC 2.4...) - Neisseria meningitidis
Clycosyl transferase E (EC 2.4...) - Neisseria meningitidis
Clycosyl transferase E (EC 2.4...) - Nebel 1998 #text_change 09-Jul-2004
Clycosylon: S70815
Mol. Microbiol. 18, 729-740, 1995
A,Title: Molecular analysis of a locus for the biosynthesis and phase-variable expression A,Title: Molecular analysis of a locus for the biosynthesis and phase-variable expression A,Title: Molecular analysis of a locus for the biosynthesis and phase-variable expression A,Title: Molecular analysis of a locus for the biosynthesis and phase-variable expression A,Tocossion: S70815
A,Status: preliminary; nucleic acid sequence not shown A,Rocasion: DARA
A,Rocasion: DARA
A,Rossidues: 1-276 <JENA
A,Rossicular analysis (C,Genetics: UNIPROT:Q51117; EMBL:U25839; NID:g973183; PIDN:AAC44086.1; PID:g97318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Species: Mycoplasma pulmonis
C;Species: Mycoplasma pulmonis
C;Date: 24-May_2001 #sequence_revision 24-May_2001 #text_change 09-Jul-2004
C;Accession: E90589
R;Chambaud, I; Heilig, R; Ferris, S; Barbe, V; Samson, D; Galisson, F; Moszer, I;
Nucleic Acids Res. 29, 2145-2153, 2001
A;Title: The complete genome sequence of the murine respiratory pathogen Mycoplasma pulmc
A;Reference number: A99512; MUID:21267165; PMID:11353084
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A;Experimental source: strain UAB CTIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A,Gene: lgtE
C,Superfamily: lipopolysaccharide biosynthesis-associated protein
C,Keywords: glycosyltransferase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 25.0%; Score 5; DB 2; Length 276; Best Local Similarity 100.0%; Pred. No. 1.6e+02; Matches 5; Conservative 0; Mismatches 0; Indels
                                 DB 2; Length 275;
0. 1.6e+02;
ches 0; Indels
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C,Superfamily: deoxyribonuclease IV (phage T4-induced)
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                                                                                                            0; Mismatches
                                         Query Match 25.0%; Score 5; I Best Local Similarity 100.0%; Pred. No. Matches 5; Conservative 0; Mismatch
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A;Molecule type: DNA
A;Residues: 1-277 <KUR>
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91ycosyl transferase B (EC 2.4...-) - Neisseria meningitidis
C;Species: Neisseria meningitidis
C;Species: Neisseria meningitidis
C;Date: 12-Feb-1998 #sequence_revision 20-Feb-1998 #text_change 09-Jul-2004
C;Accession: S70814
E;Jennings, M.P.; Hood, D.W.; Peak, I.R.A.; Virji, M.; Moxon, E.R.
Mol. Microbiol. 18, 729-740, 1995
A;Pitle: Molacular analysis of a locus for the biosynthesis and phase-variable expressic
A;Reference number: S70812; MUID:96414473; PMID:8817494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cipacies: Neisseria meningitidis de la meningitidis erogicup B.K.; Haft, D.H.; Salzberg, S.L.; White, O.; Fleischmann, R.D.; Dougherty, B.A.; H.; Qin, H.; Qanathevan, J.; Gill, J.; Scarlato, V.; Masignani, V.; Pizza, M. Scarlato, N.; Masignani, V.; Pizza, M. A; Authores Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Ve A; Title: Complete genome sequence of Neisseria meningitidis serogroup B strain McS8.

A; McGession: C81027

A; Status; preliminary
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A;Status: DNA
A;Molecule type: DNA
A;Residues: 1-275 <JEN>
A;Residues: 1-275 <JEN>
A;Cross-references: UNIPROT:Q51116; EMBL:U25839; NID:g973183; PIDN:AAC44085.1; PID:g9731
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A;Residues: 1-275 <TET>
A;Cross-references: UNIPROT:Q51116; GB:AE002541; GB:AE002098; NID:g7227175; PIDN:AAF4225
A;Experimental source: serogroup B, strain MC58
                                                                                                                                                                                                                                           A;Residues: 1-268 <PAR>
A;Residues: UNIPROT:Q9JW65; GB:AL162753; GB:AL157959; NID:g7379120; PIDN:CABB381
A;Experimental source: serogroup A, strain Z2491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lacto-N-neotetraose biosynthesis glycosyl transferase LgtB NMB1928 [imported] - Neisseri
Nature 404, 502-506, 2000
ArTitle: Complete DNA sequence of a serogroup A strain of Neisseria menigitidis Z2491.
A;Reference number: A81775; MUID:20222556; PMID:10761919
A;Accession: B81971
A;Status: preliminary
A;Molecule type: DNA
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C,Superfamily: lipopolysaccharide biosynthesis-associated protein
C,Keywords: glycosyltransferase
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C;Superfamily: lipopolysaccharide biosynthesis-associated protein
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25.0%; Score 5; DB 2; Length 268;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 5; Conservative 0; Mismatches 0; Indels
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A;Gene: NMB1
C;Superfamil
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Cipecates: Mycobacterium tuberculosis. Cipate: 17-011-1998 #sequence_revision 17-011-1998 #text_change 09-011-2004
Cipate: 17-011-1998 #sequence. T.; Garnier, C.; Hamlin, N.; Holxoyd, S. Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holxoyd, S. Raindream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S. Naturnors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
A.Yatile: Deciphering the biology of Mycobacterium tuberculosis from the complete genome A.Reference number: A70500; MUID:98295987; PMID:9634230
A.Ratere preliminary; nucleic acid sequence not shown; translation not shown
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A;Residues: 1-284 <WIL>
A;Cross-references: UNIPROT:020656; EMBL:Z66564; PIDN:CAA91475.1; GSPDB:GN00028; CESP:F52
A;Experimental source: clone F52D10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,Residues: 1-280 <COL>
A,Cross-references: UNIPROT:Q11163; GB:Z77162; GB:AL123456; NID:g3261606; PIDN:CAB00924.
A,Experimental source: strain H37Rv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein F52D10.4 - Caenorhabditis elegans
C;Species: Ceenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T22501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hypothetical protein Rv0498 - Mycobacterium tuberculosis (strain H37RV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Superfamily: Streptomyces coelicolor hypothetical protein SCB7.14c
                           C;Genetics:
A;Gene: NMB1926
C;Superfamily: lipopolysaccharide biosynthesis-associated protein
                                                                                                                                                                                                                             Length 280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25.0%; Score 5; DB 2; Length 280; 100.0%; Pred. No. 1.6e+02; ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                      Query Match
25.0%; Score 5; DB 2; Ler
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 5; Conservative 0; Mismatches 0;
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A;Introns: 60/3; 104/3; 143/1; 180/3; 255/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity
Thes 5; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                           15 LETMF 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Gene: CESP: F52D10.4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gene: Rv0498
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C;Date: 05-May-2000 #sequence_revision 05-May-2000 #text_change 09-Jul-2004
C;Date: 05-May-2000 #sequence_revision 05-May-2000 #text_change 09-Jul-2004
C;Accession: A81971
R;Parkhill, J.; Achtman, M.; James, K.D.; Bentley, S.D.; Churcher, C.; Klee, S.R.; Morel
R;Parkhill, J.; Achtman, M.; James, K.D.; Bentley, S.D.; Churcher, C.; Klee, S.R.; Morel
R;Parkhill, J.; Adgels, K.; Leather, S.; Moule, S.; Mungall, K.; Quail, M.A.; Rajandream,
A;Tille: Complete DNA sequence of a serogroup A strain of Neisseria menigitidis Z2491.
A;Reference number: A81775; MUD:20222556; PMID:10761919
A;Reterence number: A81775; MUD:20222556; PMID:10761919
A;Status: preliminary
A;Reterence number: A81771
A;Status: Dreliminary
A;Reterence number: A81775
A;Reterence number: A81971
A;Status: Dreliminary
A;Status: Dreliminary
A;Status: Dreliminary
A;Status: Dreliminary
A;Reterences: UNIPROT:P57033; GB:AL162753; GB:AL157959; NID:97379120; PIDN:CAB8381
C;Genetics:
A;Gene: lgtB; NMA0525
C;Superfamily: lipopolysaccharide biosynthesis-associated protein
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Jacto-N meotetraose biosynthesis glycosyl transferase LgtE NMB1926 [imported] - Neisseri
Jacto-N meotetraose biosynthesis glycosyl transferase LgtE NMB1926 [imported] - Neisseri
C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 09-Jul-2004
C;Accession: A81021
R;Tettelin, H.; Saunders, N.J.; Heidelberg, J.; Jeffries, A.C.; Nelson, K.E.; Eisen, J.R
Hickey, E.K.; Haft, D.H.; Salzberg, S.L.; White, O.; Fleischmann, R.D.; Dougherty, B.A.;
Ti, Rin, H.; Vamathevan, J.; Gill, J.; Scarlato, V.; Masignani, V.; Pizza, M.
A;Authors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Ve
A;Ritle: Complete genome sequence of Neisseria meningitidis serogroup B strain Mc58.
A;Reference number: A81000; MUID:2017575; PMID:10710307
A;Accession: A81027
A;Accession: A81027
A;Accession: A81027
A;Accession: A81027
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lacto-N-neotetraose biosynthesis glycosyl transferase NMA0525 [imported] - Neisseria men
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A;Residues: 1-280 <TET>
A;Cross-references: UNIPROT:Q51117; GB:AE002541; GB:AE002098; NID:g7227175; PIDN:AAF4225
A;Experimental source: serogroup B, atrain MC58
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C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
C;Accession: T27610
R;Du, Z.
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A; Cross-references: EMBL:U40802; PIDN:AAA81511.1; CESP:ZC477.8
C; Genetics:
A; Introns: 77/1
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                                                                                                                Submitted to the EMBL Data Library, November 1995
A; Description: The sequence of C. elegans cosmid ZC477.
A; Accession: T27610
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A: Molecule of Status: DNA
A: Mole
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Best Local Similarity 100.
Matches 5, Conservative
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Matches 5; Conserv
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C;Species: Aeropyrum pernix
C;Date: 20-Aug-1999 #text_change 09-Jul-2004
C;Accession: G72776
C;Accession: G72776
C;Accession: G72776
A;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; Takaha awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Jin-no, K.; Takaha awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; K. DNA Res. 6, 83-101, 1999
A;Tile: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Aeropyrt A;Teference number: A72450; MuID:99310339; PMID:10382966
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-304 <KAW>A;Residues: 1-304 <KAWABA;Residues: 1-304 <KAWA
                                                                                                                                                          A;Residues: 1296 <WILD-
A;Cross-references: UNIPROT:022389; EMBL:Z54237; PIDN:CAA90989.1; GSPDB:GN00022; CESP:T11
A;Experimental source: clone T11B7
C;Genetics:
A;Gene: CESP:T11B7.3
A;Gene: CESP:T11B7.3
A;Map position: 45/3; 111/1; 270/1
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A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-305 < WILb.
A;Cross-references: UNIRPOT:017805; EMBL:Z81503; PIDN:CAB04111.1; GSPDB:GN00021; CESP:F14
A;Experimental source: clone F14F7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein APE0201 - Aeropyrum pernix (strain K1)
A, Reference number: Z19940
A, Accession: T24827
A, Status: preliminary; translated from GB/EMBL/DDBJ
A, Molecule type: DNA
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A, Gene: APE0201
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Best Local Similarity 100.
Matches 5; Conservative
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A; Introns: 27/3; 49/3
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                                                                                                                                             C;Species: Listeria innocua
C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004
C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004
C;Datession: AB1529
R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bloecker, Dominguez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, H. D.; Jones, L.M.; Karst, U. Science 294, 849-852, 2001
A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A.; Maok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, A;Reference number: AB1077; MUID:21537279; PMID:11679669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-288 «GLA>
A;Expers_references: UNIPROT:Q92DP3; GB:AL592022; PIDN:CAC96002.1; PID:g16413221; GSPDB:G
A;Experimental source: strain Clip11262
C;Genetics:
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C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004
C;Accession: C72378
R;Nelson, K.E.; Clayton, R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, D.H.; Hickey
Garrett, M.M.; Stewart, A.M.; Cotton, M.D.; Pratt, M.S.; Phillips, C.A.; Richardson, D.;
                                                                                                                       transcription regulator (repressor) homolog lin0770 [imported] - Listeria innocua (strai
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A;Reference number: A72200; MUID:99287316; PMID:10360571
A;Accession: C72378
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A;Experimental source: strain MSB8
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C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: T24827
C;Accession: T24827
R;Gardner, A.
submitted to the EMBL Data Library, September 1995
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C;Superfamily: inner membrane protein ugpA
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A;Molecule type: DNA
A;Residues: 1-294 <ARN>
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DNA Res. 5, 55-76, 1998

A;Title: Complete sequence and gene organization of the genome of a hyper-thermophilic a A;Reference number: A71000; MUID:98344137; PMID:9679194

A;Accession: G71110
                                                                                                                                                                                                                                                                                                       A,Cross-references: UNIPROT.058388, GB.AP000003, NID:g3236130, PIDN:BAA29745.1, PID:g325
A,Experimental source: strain 0T3
A,Note: this accession replaces an interim accession for a sequence replaced by GenBank
C;Genetics:
A,Gene: PH0654
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N.Alternate names: calcium-activated neutral proteinase (CANP)
C;Species: Orycholagus cuniculus (domestic rabbit)
C;Species: Orycholagus cuniculus (domestic rabbit)
C;Accession: A24015; A41418
R;Emori, Y.; Kawasaki, H.; Sugihara, H.; Imajoh, S.; Kawashima, S.; Suzuki, K.
J. Biol. Chem. 261, 9465-9471, 1986
A;Ritle: Isolation and sequence analyses of CDNA clones for the large subunits of two isc A;Reference number: A92594; MuID:86250902; PMID:2424911
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A; Residues: 19-320 < EMO>
A; Cross-references: UNIPROT: P06815; GB:M13363; NID:g165667; PIDN:AAA31456.1; PID:g165668
R; Kawasaki, H.; Imajoh, S.; Suzuki, K.
J. Biochem. 102, 393-400, 1987
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C; Superfamily: calpain large chain; calmodulin repeat homology; calpain catalytic domain
C; Superfamily: calpain large chain; calmodulin repeat homology cREL>
F; 148-179/Domain: calmodulin repeat homology CREL>
F; 191-223/Domain: calmodulin repeat homology CREL>
F; 224-23/Domain: calmodulin repeat homology CRES>
F; 224-233/Domain: calmodulin repeat homology CRES>
F; 256-288/Domain: calmodulin repeat homology CRES>
F; 256-288/Domain: calmodulin repeat homology CRES>
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Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S
DNA Res. 8, 205-213, 2001
M.; Ohfuku, Y.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Kushida, N.; Oguchi
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Nostco sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC 7120
C.Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Jul-2004
C.Accession: AB2574
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100.0%; Pred. No. 1.8e+02;
live 0; Mismatches 0;
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A;Molecule type: protein
A;Residues: 1-18;125-154;313-320 <KAW>
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Matches 5; Conservative
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malonyl CoA-acyl carrier protein transacylase [imported] - Staphylococcus aureus (strain C)89896
malonyl CoA-acyl carrier protein transacylase [imported] - Staphylococcus aureus (c)8pecies: Staphylococcus aureus
C; Spacession: A89896
C; Accession: A89896
R; Kuroda, M; Ohta, T; Uchiyama, I; Baba, T; Yuzawa, H; Kobayashi, I; Cui, L; Oguc
R; Kuroda, M; Ohta, T; Hattori, M; Gassawara, N; Hayashi, H; Hiramatsu, K.
C; Shiba, T; Hattori, M; Gassawara, N; Hayashi, H; Hiramatsu, K.
Lancet 357, 1225-1240, 2001
A; Title: Whole genome sequencing of meticillin-resistant Stapylococcus aureus.
A; Reference number: A89758; MUID:21311952; PMID:11418146
A; Accession: A89896
A; Cassion: A89896
A; Cas
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C'Species: Pyrococcus abyssi
C'Species: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jul-2004
C'Accession. H75049
R'anonymous, Genoscope
Submitted to the EMBL Data Library, July 1999
A'Description: Pyrococcus abyssi genome sequence: insights into archaeal chromosome stru
A'Reference number: A75001
A'Accession: H75049
A'Accession: H75049
A'Accession: H75049
A'Accession: Breliminary
A'Molecule type: DNA
A'Residues: 1-308 <KMN>
A'Residues: 1-308 <KMN>
A'Accession: GB:AL096836; NID:G5458657; PIDN:CAB5029
A'Experimental source: strain Orsay
C'Genetics:
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C;Species: Pyrococcus horikoshii
C;Accession: G71110
C;Accession: G71110
R;Kawarabayasi, Y.; Sawada, M.; Horikawa, H.; Haikawa, Y.; Hino, Y.; Yamamoto, S.; Sekin
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C;Species: Pyrococcus abyssi
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                                                                                                                           193 PRGAP 197
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                                                   1 PRGAP
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Unknown protein [imported] - Arabidopsis thaliana
CiSpecies: Arabidopsis thaliana (mouse-ear cress)
CiSpecies: Arabidopsis thaliana (mouse-ear cress)
CiAccession: D96761
RiTheologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso,
Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.;
ansen, N.F.; Hughes, B.; Huizar, L.
Nature 408, 816-820, 2000
A.; Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.;
C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marziali,
Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A.Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, I
ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A.Fitle: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A.Reference number: A86141; MUID:21016719; PMID:11130712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Hyoscyamus niger (henbane)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Accession: A40005
R;Matsuda, 7.; Okabe, S.; Hashimoto, T.; Yamada, Y.
J. Biol. Chem. 266, 9460-9464, 1991
A;Title: Molecular cloning of hyoscyamine 6beta-hydroxylase, a 2-oxoglutarate-dependent of A;Reference number: A40005; MUID:91236712; PMID:2033047
                                                                                                                                               A,Cross-references: UNIPROT:080796; EMBL:AC004512; NID:g3335331; PID:g3335333; PIDN:AAC2:C,Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A.Cross-references: UNIPROT:P24397, GB:M62719; NID:g168267; FIDN:AAA33387.1; FID:g168268 (S.Guperfennily: 1-aminocyclopropane-1-carboxylate oxidase C;Superfamily: 1-aminocyclopropane-1-carboxylate oxidase C;Keywords: ascorbic acid; iron; metalloprotein; oxidoreductase F;66,217,274/Binding site: iron (His) #status predicted
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A;Introns: 47/1; 83/3; 120/3; 142/2; 169/3; 194/3; 218/2; 246/1; 267/3; 292/3
C;Superfamily: probable lipid transfer protein M30
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                                                                                                                                                                                                                                                                                                                                                                         25.0%; Score 5; DB 2; Length 330; 100.0%; Pred. No. 1.8e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hyoscyamine (6S)-dioxygenase (EC 1.14.11.11) - henbane
                                                       A;Status: translated from GB/EMBL/DDBJA;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 5; Conservative
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Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
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                                                                                                                           A; Residues: 1-330 <VYS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      269 OMLET 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13 QMLET 17
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                                                                                                                                                                                                                          A; Gene: ATSP: T8F5.2
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                                       A; Accession: T02347
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A;Experimental source: serogroup O1; strain N16961; biotype E1 Tor
A;Accession: D82478
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-326 <HE2>
A;Residues: 1-326 <HE2>
A;Cross-references: GB:AE004368; GB:AE003853; NID:g9657677; PIDN:AAF96191.1; G8FDB:GN001
C;Genetics: <GEN1>
A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Ana
A;Reference number: AB1807; MUID:21595285; PMID:11759840
A;Accession: AB2574
                                                                                                                           A,Status: preliminary
A,Molecule type: DNA
A,Residues: 1-325 <KUR>
A,Residues: 1-325 <KUR>
A,Cross-references: UNIPROT:Q8YUU6; GB:AP003605; PIDN:BAB77503.1; PID:g17134948; GSPDB:G
A,Experimental source: strain PCC 7120
C;Genetics:
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 05-Mar-1999 #sequence_revision 05-Mar-1999 #text_change 09-Jul-2004
C;Accession: T0247
R;Vysotskaia, V.S.; Schwartz, J.R.; Toriumi, M.; Yu, G.; Kwan, A.; Liu, S.; Li, J.; Arau Li, Y.; Palm, C.J.; Shinn, P.; Sun, H.; Davis, R.W.; Ecker, J.R.; Federspiel, N.A.; Thed submitteed to the EMBL Data Library, July 1998
A;Pescription: Arabidopsis thaliana chromosome 1 BAC T08F5 complete sequence.
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C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
C;Accession: H82455; D82478
R;Heidelberg, J.F.; Eisen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; Dodson, R.J.
Chardson, D.; Ermolaeva, M.D.; Vamathevan, J.; Bass, S.; Qin, H.; Dragoi, I.; Sellers, J. R.R.; Mekalanos, J.J.; Venter, J.C.; Fraser, C.M.
Nature 406, 477-483, 2000
A;Ittle: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae.
A;Reference number: A82035; MUID:20406833; PMID:10952301
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Best Local Similarity
Matches 5; Conserv
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A;Molecule type: DNA
A;Residues: 1-326 <HEI>
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Best Local Similarity
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Genetics: <GEN2>
Gene: VCA0282
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Tue Oct 26 08:02:21 2004

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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004
C;Accession: T08803
R;Bevan, M.; Zimmermann, W.; Grueneisen, A.; Wambutt, R.; Bancroft, I.; Mewes, H.W.; Maysubmitted to the Procein Sequence Database, May 1999
A;Reference number: Z16518
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A; Cross-references: UNIPROT:074803; EMBL:AL031788; PIDN:CAA21170.1; GSPDB:GN00067; SPDB:
A; Cross-references: UNIPROT:074803; EMBL:AL031788; PIDN:CAA21170.1; GSPDB:GN00067; SPDB:
B; Experimental source: strain 972h-; cosmid c2D10
B; Experimental source: strain 972h-; cosmid c2D10
B; Eder, R.T.
submitted to the EMBL Data Library, July 1999
A; Description: A fission yeast orthologue (rhp23) of the human nucleotide excision repai A; Reference number: 225362
A; Reference number: 225362
A; Accession: T51298
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             uv excision repair protein rad23 homolog - fission yeast (Schizosaccharomyces pombe) (S. Species: Schizosaccharomyces pombe (C. Species: Schizosaccharomyces pombe (C. Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 16-Aug-2004 (C. Accession: T40115; T51298 (T. Marris) (T. Marris)
                                                                                                                                                                                                                                                                                      A;Molecule type: DNA
A;Residues: 1-364 <BEV>
A;Cross-references: UNIPROT:Q9T099; EMBL:AL078468; GSPDB:GN00062; ATSP:T32A16.10
A;Experimental source: cultivar Columbia; BAC clone T32A16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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100.0%; Pred. No. 2e+02;
cive 0; Mismatches 0
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A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
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A;Cross-references: EMBL:AF174293; PIDN:AAD51975.1
A;Experimental source: strain SP223
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A;Introns: 23/3; 48/1; 328/3; 351/3
C;Superfamily: ubiquitin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Gene: rhp23; SPDB:SPBC2D10.12
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Matches 5: Conserv
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Matches 5; Conserv
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A;Introns: 153/1; 325/1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Gene: ATSP: T32A16.10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           hypothetical protein F29B9.9 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: 15-Oct-1399 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T2993.
R;Goela, D.; Gattung, S.
submitted to the EMBL Data Library, September 1996
A;Bescription: The sequence of C. elegans cosmid F29B9.
A;Reference number: Z20710
A;Reference number: Z20710
A;Returs: preliminary; translated from GB/EMBL/DDBJ
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Returs: preliminary;
A;Molecule type: DNA
A;Residues: 1-355 <GGE>
A;Cross-references: UNIPROT:Q9GYI3; EMBL:U70849; PIDN:AAB09121.1; GSPDB:GN00022; CESP:F2
A;Genetics:
A;Introns: 92/1
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submitted to the EMBL Data Library, August 1995
A;Reference number: 219843
A;Accession: T24137
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Aclastius: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-357 «MIL»
A;Cross-references: UNIPROT:Q21900; EMBL:Z50874; PIDN:CAA90772.1; GSPDB:GN00021; CESP:R1
C;Genetics:
A;Gene: CESP:R10B4.2a
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Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 16-Aug-2004
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                                                          DB 2; Length 351; 1.9e+02;
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                                                                                                                                 Indels
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T08903
hypothetical protein T32A16.10 - Arabidopsis thaliana
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A,Introns: 42/3; 80/3; 249/3; 349/3
C,Superfamily: ribonucleoprotein repeat homology
                                                      25.0%; Score 5; DB 2
100.0%; Pred. No. 1.9
tive 0; Mismatches
                                                      Query Match
Best Local Similarity 100.8
Matches 5; Conservative
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Best Local Similarity 100.0
Matches 5; Conservative
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Best Local Similarity
Matches 5; Conserv
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hypothetical protein At2g44130 [imported] - Arabidopsis thaliana
NiAlternate names: hypothetical protein F6E13.26
C.Species: Arabidopsis thaliana (mouse-ear cress)
C.Species: Arabidopsis thaliana (mouse-ear cress)
C.Date: 01-Feb-1999 #sequence_revision 01-Feb-1999 #text_change 09-Jul-2004
C.Accession: T006593, G848774
S.Rounsley, S.D.; Kaul, S.; Lin, X.; Ketchum, K.A.; Crosby, M.L.; Brandon, R.C.; Sykes, Esubmitted to the EMBL Data Library, June 1998
A.Description: Arabidopsis thaliana chromosome II BAC F6E13 genomic sequence.
A.Accession: T00693
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A, Status: translated from GB/EMBL/DDBJ
A, Molecule type: DNA
A, Molecule type: DNA
A, Molecule type: DNA
A, Molecule type: DNA
A, Essidues: 1-407 < ROUJ
A, Cross-references: UNIPROT: O80582; EMBL: AC004005; NID: G3212846; PID: G3212866
A, Experimental source: cultivar Columbia
R, Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y.; N
M; Koo, H.; Moffart, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, L.;
Euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, J.
Nature 402, 761-768, 1999
A, Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana.
A, Reference number: A84420; MUID: 20083487; FMID: 10617197
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C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 16-Aug-2004
C;Accession: T24138
R;Ainscough, R.
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A;Residues: 1-409 <WIL>
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A;Introns: 42/3; 106/3; 301/3; 401/3
C;Superfamily: ribonucleoprotein repeat homology
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A;Reference number: Z19843
A;Accession: T24138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Experimental source: clone R10E4
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Matches 5; Conserv
                                                       242 PRGAP 246
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Residues: 1-407 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             202 OMLET 206
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Status: preliminary A;Molecule type: DNA
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C;Species: Haemophilus influenzae
C;Species: Haemophilus influenzae
C;Species: Haemophilus influenzae
C;Species: Jacoun-1992 #sequence_revision 30-Jun-1992 #text_change 09-Jul-2004
C;Accession: 31232
B;Kroll, J.S.; Loynds, B.; Brophy, L.N.; Moxon, E.R.
Mol. Microbiol. 4, 1853-1862, 1990
A;Reference number: S12332; MulD:91186821; PMID:2082145
A;Accession: S12332
A;Accession: S12332
A;Accession: S12332
A;Accession: S12332
A;Residues: 1.394 ckRo>
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C;Genetics:
A;Gene: bexD
C;Superfamily: bexD protein
1, R.R.; Mekalanos, J.J.; Venter, J.C.; Fraser, C.M.
Miture 406, 477-483, 2000
A;Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae.
A;Reference number: A82035; MUID:20406833; PMID:10952301
A;Accession: D82264
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-382 <HEI>A;Residues: 1-382 <HI
A;Residues: 1-382 <HEI>A;Residues: 1-382 <HI
A;Residues: 1-382 <HI
A;Residu
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A;Cross-references: UNIPROT:Q54197; EMBL:X73148; NID:g407882; PIDN:CAA51670.1; PID:g4078
C;Superfamily: acyl-CoA dehydrogenase
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C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 09-Jul-2004
C;Accession: 339965 #sequence_revision 20-Feb-1995 #text_change 09-Jul-2004
C;Accession: 339963; H.; Schumann, G.; Haenel, F.; Fiedler, G.
R;Kruegel, H.; Schumann, G.; Haenel, F.; Fiedler, G.
Mol. Gen. Genet. 241, 193-202, 1993
A;Title: Nucleotide sequence analysis of five putative Streptomyces griseus genes, one volved in TDP-daunosamine formation.
A;Reference number: S39963; MUID:94049680; PMID:8232204
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A,Status: preliminary
A,Molecule type: DNA
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RESULT 75
D87492
hypothetical protein CC1961 [imported] - Caulobacter crescentus
C;Species: Caulobacter crescentus
C;Species: Caulobacter crescentus
C;Species: Caulobacter crescentus
C;Accession: D87492
R;Nierman, W.C; Feldblyum, T.V.; Paulsen, I.T.; Nelson, K.E.; Eisen, J.; Heidelberg, J.
B; Laub, M.T.; DeBoy, R.T.; Dodson, R.J.; Durkin, A.S.; Gwinn, M.L.; Haft, D.H.; Kolon
I.J.; Ermolaeva, M.; White, O.; Salzberg, S.L.; Shapiro, L.; Venter, J.C.; Fraser, C.M.
Proc. Natl. Acad. Sci. U.S.A. 98, 4156-4141, 2001
A;Title: Complete Genome Sequence of Caulobacter crescentus.
A;Reference number: A87249; MUID:21173698; PMID:11259647
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A;Status: preliminary
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C;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
A;Superfamily: heat shock protein hslU; FtsH/SEC18/CDC48-type ATP-binding domain homolog
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Search completed: October 26, 2004, 07:23:36 Job time : 20.5 secs

15 LETMF 19 |||||| 378 LETMF 382

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Q9rrq4 deinococcus
Q8lna8 oryza sativ
Q83vq5 methylobaci
Q7nxh5 chromobacte
P20263 mus musculu
Aah68268 mus musculu
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P43522 thermus the
Q72h33 thermus the
Aas82004 thermus t
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Q87ip7 vibrio para
Q8iv69 homo sapien
Q6flul mesoplasma
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Cae76802 mycoplasm
Cae76802 mycoplasm
Q7xjb9 drosophila
Q7yv13 trypanosoma
Q8a180 bacteroides
P12430 bunyavirus
Q9v9a9 drosophila
Q80ke5 rabies viru
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      5.1.6
Compugen Ltd.
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                                                                                                         1825181 seqs, 575374646 residues
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       GenCore version (c) 1993 - 2004
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DDEF THETH
Q72733
AAS82004
DDEF DEIRA
Q81NA8
Q81NA8
Q97NXH5
P051_M0USE
AAH68268
Q971P7
Q811P3
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Q8A180
Q8A180
Q9V9A9
Q80XE5
Q80XE5
Q80XE7
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ALIGNMENTS

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                                                                                                                                                                                        STRAIN=CDC 1551 / Oshkosh;
MEDLINE=22206494; PubMed=1218036;
MEDLINE=22206494; PubMed=1218036;
Pleischmann R.D., Alland D., Eisen J.A., Carpenter L., White O., Peterson J.D., DeBoy R.T., Dodson R.J., Gwinn M.L., Haft D.H., Hickey E.K., Kolonay J.F., Nelson W.C., Umayam L.A., Ermolaeva M.D., Salzberg S.L., Delcher A., Utterback T.R., Weidman J.F., Khouri H.M., Frager C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                           "Whole-genome comparison of Mycobacterium tuberculosis clinical and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Trichosurus vulpecula (Brush-tailed possum).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Metatheria, Diprotodontia, Phalangeridae, Trichosurus.
                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                   Mycobacterium tuberculosis.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Mycobacteriaceae; Mycobacterium.
                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Frankenberg S., Tisdall D., Selwood L.;
Submitted (JUL-2003) to the EMBL/GenBank/DDBJ databases.
-1. SUBCELLULAR LOCATION: Nuclear (By similarity).
EMBL, A7345973; AAQ24229.1; -..
InterPro; IPR00135; Homeobox.
InterPro; IPR010982; Homeodomain like.
InterPro; IPR010982; pou.
InterPro; IPR0010982; pou.
InterPro; IPR00110983; POU.
                                                                                                                                                                                                                                                                                                                                                                                            Length 82;
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
POU domain class 5 transcription factor 1-like protein
                                                                                                                                                                                                                                                                                                                                  EMBL), ALT.
TIGR; MT2341; -
HYDOLhetical protein.
Aypother as AA: 8995 MW; C46009E4E66DC09E CRC64;
                                                                                   Last annotation update)
                                                                         Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                         30.0%; Score 6; DB 2;
100.0%; Pred. No. 25;
iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             189 AA.
                                                          Created)
                                  PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mol. Reprod. Dev. 58:255-261(2001)
                                                                                                                                                                                                                                                                                                    laboratory strains.";
J. Bacteriol. 184:5479-5490(2002).
EMBL; AE007077; AAK46625.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=21094456; PubMed=11170265;
                                                     01-MAR-2002 (TrEMBLrel. 20, C
01-MAR-2002 (TrEMBLrel. 20, I
01-MAR-2002 (TrEMBLrel. 20, I
Hypothetical protein MT2341.
OrderedLocusNames=MT2341;
                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                   6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 RGAPMW 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      brushtail possum."
                                                                                                                                                                                                                                                                                                                                                                                                                                         2 RGAPMW 7
                                                                                                                                                        NCBI_TaxID=1773;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI TaxID=9337;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Name=POUSF1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fragment)
                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                            OBVJN1;
                                Q8VJN1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            O6VAB5
                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Q6VAB5
        RESULT 1
                     Q8VJN:
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Frankenberg S., Tisdall D., Selwood L.;
"Identification of a homologue of POUSF1 (OCT3/4) in a marsupial, the
brushtail possum.";
                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Trichosurus vulpecula (Brush-tailed possum).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Metatheria, Diprotodontia, Phalangeridae, Trichosurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Peptide deformylase (EC 3.5.1.88) (PDF) (Polypeptide deformylase)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Thermus thermophilus.
Bacteria; Deinococcus-Thermus; Deinococci; Thermales; Thermaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                  Length 189;
                                                                                                                                                                                                                                                                                                                                                              0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
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Frankenberg S., Tisdall D., Selwood L.;
Submitted (UUL-2003) to the EMBL/GenBank/DDBJ databases.
EMBL, AY345973; AAQ24229.1; -.
                                                                                                                                                                                                                                                                      189 AA; 21027 MW; 119434E56E647C6B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-MAR-2004 (TrEMBLrel. 27, Created)
02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
02-MAR-2004 (TrEMBLrel. 27, Last sentotation update)
POU domain class 5 transcription factor 1-like protein
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100.0%; Pred. No. 53;
ative 0; Mismatches
                                                                                                                                                                                                                                                                                                                  DB 2;
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100.0%; Pred. No. 53;
ive 0; Mismatches
                                                                                                        SMART; SM00389; HOX; 1.
SMART; SM00389; HOX; 1.
PROSITE; PS00027; HOWEDBOX 1; 1.
PROSITE; PS00465; FOU 2; 1.
DNA-binding; Homeobox; Nuclear protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mol. Reprod. Dev. 58:255-261(2001)
Pfam, PF00157; Pou, 1.
PRINTS; PR00024; HOWECBOX.
PRINTS; PR00028; POUDOMAIN.
PRODOM; PD000010; HOMECDOX; 1.
ProDom; PD000583; POU; 1.
                                                                                                                                                                                                                                                                                                                  30.08;
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Henne A., Brueggemann H., Raasch C., Wiezer A., Hartsch T., Liesegang H., Johann A., Lienard T., Goll O., Martinez-Arias R., Jacobi C., Starkuviene V., Schlenczeck S., Dencker S., Huber R., Klenk H.-P., Kramer W., Merkl R., Gottschalk G., Fritz H.-J., "The genome sequence of the extreme thermophile Thermus
                                                                                                                                                                                                                                                                                                                   ProDom; PD003844; Fmet_deformylase; 1. TIGRFAMs; TIGR0079; pept_deformyl; 1. Complete proteome; Hydrolase: EQUENCE 192 AA; 22095 MW; 6659451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nat. Biotechnol. 22:547-553(2004).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           6; Conservative
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[1]
SEQUENCE FROM N.A.
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                                   PubMed=15064768;
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                                                                                                                                                   thermophilus."
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Q9RRQ4;
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Matches
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ID DEF_D
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DT 28-FE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                           Meinel T., Lazennec C., Villong S., Blanquet S.;

"Structure-function relationships within the peptide deformylase
"Structure-function relationships within the peptide deformylase
I family. Evidence for a conserved architecture of the active site
I involving three conserved motifs and a metal ion.";

J. Mol. Biol. 267:749-761(1997).

-!-FUNCTION: Removes the formyl group from the N-terminal Met of
newly synthesized proteins. Requires at least a dipeptide for an
efficient rate of reaction. N-terminal L-methionine is a
prerequisite for activity but the enzyme has broad specificity at
other positions (By similarity).

-!- CATALYTIC ACTIVITY: Formyl-L-methionyl peptide + H(2)O = formate +
methionyl peptide.

-!- COFACTOR: Binds 1 iron(II) ion (By similarity).

-!- SIMILARITY: Belongs to the polypeptide deformylase family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                             Meinnel T., Blanguet S., "Characterization of the Thermus thermophilus locus encoding peptide deformylase and methionyl-tRNA(fmet) formyltransferase."; J. Bacteriol. 176:7387-7390(1994).
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Polypeptide deformylase, fms protein-like protein (EC 3.5.1.31).
OrderedLocusNames=TTC1662;
Thermus thermophilus (strain HB27 / ATCC BAA-163 / DSM 7039).
Bacteria; Deinococcus-Thermus; Deinococci; Thermales; Thermaceae;
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Iron (By similarity).
Iron (By similarity).
Iron (By similarity).
Iron (By similarity).
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0; Mismatches
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TIGRFAMS; TIGR00079, pept deformyl; 1.
Hydrolase, Iron, Protein Diosynthesis.
ACT SITE 116 146 By similare.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HAWAP, MF_00163; -; 1.
InterPro: IRR000181; Fret deformylase.
Pefam; PF01327; Pep deformylase; 1.
PRINTS; PR01576; PDEFORMYLASE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30.0%; Score 6;
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                                                                                                                                                                                                           CHARACTERIZATION.
MEDLINE=97272005; PubMed=9126850;
                                                                           STRAIN=VK1;
MEDLINE=95050326; PubMed=7961514;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    llarity 100.0%;
Conservative 0
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                                                         SEQUENCE FROM N.A.
             NCBI_TaxID=274;
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   Thermus.
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1D Q7
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Bacteria; Deinococcus-Thermus; Deinococci; Thermales; Thermaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Henne A., Brueggemann H., Raasch C., Wiezer A., Hartsch T.,
Liesegang H., Johann A., Lienard T., Gohl O., Martinez-Arias R.,
Jacobi C., Starkuviene V., Schlenczeck S., Dencker S., Huber R.,
Klenk H.-P., Kramer W., Merkl R., Gottschalk G., Fritz H.-J.;
"The genome sequence of the extreme thermophile Thermus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-APR-2004 (TrEMBLrel. 27, Created)
14-APR-2004 (TrEMBLrel. 27, Last sequence update)
11-MAY-2004 (TrEMBLrel. 27, Last annotation update)
Polypeptide deformylase, fms protein-like protein (EC 3.5.1.31).
TTC1662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
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Nat. Biotechnol. 22:547-553(2004).

-!- SIMILARITY: Belongs to the polypeptide deformylase family.

-!- SIMILARITY: Belongs to the polypeptide deformylase family.

GO: GO:000463; F:Gormylmethionine deformylase activity; IEA.

GO: GO:0016787; F:hydrolase activity; IEA.

InterPro; IRRO0181; Fmet deformylase.

Pfam: PF01327; Pep deformylase; 1.

PRINTS: PR01576; PÜBFORMYLASE.
                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2; Length 192; . 53;
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                                                                                                                                                                                                                                                                                                                                                                    192 AA; 22092 MW; 665945183A251361 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30.0%; Score 6; DB 2;
100.0%; Pred. No. 53;
ative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       192 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                30.0%; Score 6; DB 2
100.0%; Pred. No. 53;
iive 0; Mismatches
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Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 GAPMWM 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 GAPMWM 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          σ
                                                                           NCBI_TaxID=39947;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=94001;
                                                                                                                                                                                                                                                                                                                                                                     Gramene; O8LNA8;
                                                                                                                                                                                                                                                     chromosome 10.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 APMWMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=12S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Name=epsP;
                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q83VQ5
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                     radiodurans R1.", Science 286:1571-1577(1999).

-! FUNCTION: Removes the formyl group from the N-terminal Met of newly synthesized proteins. Requires at least a dipeptide for an efficient rate of reaction. N-terminal L-methionine is a prerequisite for activity but the enzyme has broad specificity at other positions (By similarity).

-!- CATALYTIC ACTIVITY: Formyl-L-methionyl peptide + H(2)0 = formate + methionyl peptide.
-!- CORACTOR: Binds 1 iron(II) ion (By similarity).
-!- CORACTOR: Binds 1 iron(II) ion (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                         MEDLINE-20036896; PubMed=10567266; MEDLINE-20036896; PubMed=10567266; Maite O., Elsen J.A., Heidelberg J.F., Hickey E.K., Peterson J.D., Dodson R.J., Haft D.H., Gwinn M.L., Nelson W.C., Richardson D.L., Moffat K.S., Qin H., Jiang L., Pamphile W., Crosby M., Shen M., Vamathevan J.J., Lam P., McDonald L.A., Utterback T.R., Zalewski C. Makarova K.S., Aravind L., Dally M.J., Minton K.W., Fleischmann R.D., Ferser C.M.,
               Peptide deformylase (EC 3.5.1.88) (PDF) (Polypeptide deformylase) Name=def; OrderedLocusNames=DR2434;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL, AEUUL.

R PIR; H75274; H752.

DR HSSP; Q917A8; 1N5N.

DR TIGR; DRA434; -. 1.

DR HAMAP, MF 00163 -; 1.

DR HAMAP, MF 00163 -; 1.

DR PRINN'S; PR01576; PDEFORMYLASE.

DR PRINN'S; TGR00019; Pep_deformylase; 1.

DR TIGRPAMS; TIGR00079; pept_deformylase; 1.

DR TIGRPAMS; TIGR00079; pept_deformylase; 1.

DR TIGRPAMS; TIGR00079; pept_deformyl; 1.

KW Complete proteome; Hydrolase; Iron; Protein biosynthesis.

ACT_SITE 179 179 By similarity.

178 178 Iron (By similarity).

178 178 Iron (By similarity).

179 Iron (By similarity).

170 Iron (By similarity).

171 Iron (By similarity).

172 Iron (By similarity).

173 Iron (By similarity).

174 Iron (By similarity).

175 Iron (By similarity).

176 Iron (By similarity).

177 Iron (By similarity).

178 I; Length 232;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
                                                                                                                                                                                                                                                            "Genome sequence of the radioresistant bacterium Deinococcus
                                                         Bacteria; Deinococcus-Thermus; Deinococci; Deinococcales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
05-UUL-2004 (TrEMBLrel. 27, Last annotation update)
Hypothetical protein OSJNBa0047G15.19.
   update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            253 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30.0%; Score 6; DB 1
100.0%; Pred. No. 63;
ive 0; Mismatches
01-OCT-2004 (Rel. 45, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                       Deinococcaceae, Deinococcus.
NCBI_TaxID=1299;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                           Deinococcus radiodurans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14 MLETMF 19
                                                                                                                   SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
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ID Q6
AC Q6
DT 01
DT 01
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                                                                                                                                                                                          SEQUENCE FROM N.A.

McCombie W.R., Spiegel L., de la Bastide M., Nascimento L.,

Preston R., Ferraro K., Kuit K., Zutavern T., Balija V., Bell M.,

Baker J., Miller B., Katzenberger F., Muller S., King L., Sullivan P.,

Yang C., Dike S., O'Shaughnessy A., Palmer L., Dedhia N.,

Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Genes involved in the synthesis of the exopolysaccharide methanolan by the obligate methylotroph Methylobacillus sp. strain 12S."; Microbiology 149:431-444 (2003).

EMBL, AB662506; BAG55144.1; -
GO, GO:0009058; P:biosynthesis; IEA.

InterPro; IPR004629; WecB TagA_CpsF.

Fq.m., PF03808; Glyco_tran_WecB; 1.

TIGRPAM; TIGR06696; WecB tagA_CpsF; 1.

SEQUENCE 254 AA; 28235_WW; ABC67E24A8BE84C3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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ORFNames=OSJNBa0047G15.19;
Oryza sativa (japonica cultivar-group).
Bukaryota, Viridiplantea, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yoshida T., Ayabe Y., Yasunaga M., Usami Y., Habe H., Nojiri H.,
Omori T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Methylobacillus sp. 12S.
Bacteria; Proteobacteria; Betaproteobacteria; Methylophilales;
Methylophilaceae; Methylobacillus.
                                                                                                                                                                                                                                                                                                                                                                                                                  The Rice Chromosome 10 Sequencing Consortium; "In-depth view of structure, activity, and evolution of rice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 253;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

Buell C.R., Wing R.A., McCombie W.R., Messing J., Yuan Q
Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.

EMBL; AC083944; AAM74301.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein. SEQUENCE 253 AA; 27932 MW; 475202DECDDECB5D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Last sequence update)
Last annotation update)
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Pred. No. 68;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
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100.0%; Pred. No. 68;
ive 0; Mismatches
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100.0%; Pi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Science 300:1566~1569(2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TrEMBLrel. 24, (TrEMBLrel. 24, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
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13 QMLETM 18

209 APMWMR 214

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RRAIN=ATCC 12472 / DSM 30191;

RX STRAIN=ATCC 12472 / DSM 30191;

RX MEDLINE=22882889 pubMed=14500782;

RADDINE=22882890; PubMed=14500782;

RADDINE=22882890; PubMed=14500782;

RA Antonio R.V., Almeida F.C., de Almeida L.G.P., de Almeida R.,

RA Antonio R.V., Andrade E.M., Aratipe J., de Almeida R.F.F.,

RA Atves-Gomes J.A., Andrade E.M., Bartas A.J., Bataus L.A.M.,

RA Attorifi-Filho S., Azevedo V., Baptista A.J., Bataus L.A.M.,

RA Batista J.S., Belo A., van den Berg C., Bogo M., Bonatto S.A.,

RA Carvalho C.M.B., Cardoso D.D.P., Carnaro D.M.,

RA Carvalho C.M.B., Cardoso D.D.P., Carnaro D.M.,

RA Carrary B.A., Cardoso D.D.P., Carnaro D.M.,

RA Carrary B.P., Farias T.P., Cunha-Junior N.C., Fagundes N., Falco C.L.,

RA Ferro M.I.T., Franco G.R., Freitas N.S.A., Furlan L.R.,

RA Ferro M.I.T., Franco G.R., Freitas N.S.A., Furlan L.R.,

RA Gazzinelli R.T., Gomes E.A., Goncalves P.R., Grangelro T.B.,

RA Gazzinelli R.T., Osmes E.A., Goncalves P.R., Grangelro J.,

RA Gazzinelli R.T., Parence G.R., Freitas N.S.A., Furlan L.R.,

RA Adeiras H.M.F., Manfio G.P., Maranhoo A.C., Nardim S.N., Laurino J.,

RA Adeiras H.M.F., Nanfio G.P., Maranhoo A.C., Nardim S.D.,

RA Andros B.B.P., Santos F.R., Schneider M.V., Solveira J.O.,

RA Santos B.B.P., Santos F.R., Schneider M.V., Sliva R., Souza E.M., Souza E.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AE016915; AA059327.1; -.
GO; GO:0004024; F:alcohol dehydrogenase activity, zinc-dependent; IEA.
GO; GO:0008743; F:L-threonine 3-dehydrogenase activity; IEA.
GO; GO:0016491; F:oxidoreductase activity; IEA.
GO; GO:0008270; F:zinc ion binding; IEA.
GO; GO:0006567; P:threonine catabolism; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SIMILARITY: Belongs to the zinc-containing alcohol dehydrogenase
                                                                                                                                                                                                                                         Bacteria; Proteobacteria; Betaproteobacteria; Neisseriales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30.0%; Score 6; DB 2; Length 341;
100.0%; Pred. No. 88;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B58CB7B258A95451 CRC64;
                                                                                                              01-WAR-2004 (TrEMBLrel. 26, Last sequence update) 01-WAR-2004 (TrEMBLrel. 26, Last annotation update) L-threonine 3-dehydrogenase (EC 1.1.1.103). Name=tdh; OrderedLocusNames=CV1651;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProDom; PD040557; GroES related; 1.
TIGRFAMs; TS00059; tdh; 1.
PROSITE; PS00059; ADH ZINC; 1.
Complete proteome; Metal-binding; Oxidoreductase; SEQUENCE 341 AA; 37261 MW; B58CB7R25RA95451 CP
                                           341 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR002328; ADH_zinc.
InterPro; IPR002085; Adh_zn_family.
InterPro; IPR011597; GroES_related.
InterPro; IPR004627; Lihr 3_dehydrog.
InterPro; IPR000205; NAD_BS.
                                                                                            Created)
                                                                                                                                                                                                                                                             Neisseriaceae; Chromobacterium.
NCBI_TaxID=536;
                                                                                       (TrEMBLrel. 26, C
(TrEMBLrel. 26, I
(TrEMBLrel. 26, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam; PF00107; ADH_zinc_N;
                                                                                                                                                                                                                    Chromobacterium violaceum.
                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                            01-MAR-2004
                                              Q7NXH5
RESULT 10
                         27NXH5
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Gaps

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Conservative

9

Matches

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=93238934; PubMed=8097478;
Morita E.H., Shirakawa M., Hayashi F., Imagawa M., Kyogoku Y.;
"Secondary structure of the oct-3 POU homeodomain as determined by 1H-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -!- SUBCELLUTAR LOCATION: Nuclear.
-!- SIMILARITY: Belongs to the POU transcription factor family. Class-
                                                                                                                                                                                                                                                                                                                                                                                      Rosner M.H., Vigano M.A., Ozato K., Timmons P.M., Poirier F., Rigby P.W.J., Staudt L., "A POU-domain transcription factor in early stem cells and germ cells of the mammalian embryo.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Okamoto K., Okazawa H., Okuda A., Sakai M., Muramatsu M., Hamada H.; "A novel octamer binding transcription factor is differentially expressed in mouse embryonic cells."; Cell 60:461-472(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEBS Lett. 321:107-110(1993).
-!- FUNCTION: Transcription factor that binds to the octamer motif (5'-ATTIGCAT-3'). Prime candidate for an early developmental
                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Okazawa H., Okamoto K., Ishino F., Ishino-Kaneko T., Takeda S., Toyoda Y., Muramatsu M., Hamada H.;
The octi gene, a gene for an embryonic transcription factor, is controlled by a retinoic acid repressible enhancer.";
EMBO J. 10:2997-3005(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIINE=90206045; PubMed=1690859; Schoeler H.R., Ruppert S., Suzuki N., Chowdhury K., Gruss P.; "New type of POU domain in germ line-specific protein Oct-4.";
                                                                                                               P20263; Q63843;
01-FEB-1991 [Rel. 17, Created)
01-FEB-1991 [Rel. 17, Last sequence update)
01-CTT-2004 [Rel. 17, Last sequence update)
POU domain, class 5, transcription factor 1 (Octamer-binding transcription factor 3) (Oct-4) (NF-A3).
Mamme-Poubfil; Synonyms=Otf3, Oct-3, Oct-4;
Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 subfamily.
-!- SIMILARITY: Contains 1 homeobox domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or send an email to license@isb-sib.ch).
                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; M34381; AAA39844.1; ALT_SEQ.
EMBL; X52437; CAA36682.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               [3]
SEQUENCE FROM N.A.
MEDLINE=90150273; PubMed=1967980;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [4]
REVISIONS, SEQUENCE FROM N.A.
MEDLINE=92007744; Pubmed=1915274;
                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. MEDLINE=90294899; PubMed=1972777;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          [5]
STRUCTURE BY NMR OF POU DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15N NMR spectroscopy.";
FEBS Lett. 321:107-110(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nature 345:686-692(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nature 344:435-439(1990)
                                                                                                 STANDARD;
  248 OMLETM 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     control gene.
                                                                                                 PO51 MOUSE
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Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Uosdin T.B., Toshiyuki S., Carninoi P., Prange C.,
Raha S.S., Loquellano M.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarathe P.H.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Crywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Jones S.J., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. Schulte U., Aign V., Hoheisel J., Brandt P., Fartmann B., Holland R., Nyakatura G., Mewes H.W., Mannhaupt G., Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bukaryota, Fungi, Ascomycota, Pezizomycotina, Sordariomycetes,
Sordariomycetidae, Sordariales, Sordariaceae, Neurospora.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30.0%; Score 6; DB 2; Length 384; 100.0%; Pred. No. 98; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Strausberg R.;
Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; BC068268; AAH68268.1; -.
Hypothetical protein.
SEQUENCE 352 AA; 38216 MW; 757E41DF52286714 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            German Neurospora genome project;
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AL513465; CAC28792.1;
InterPro; IPR010987; GST_C_like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hypothetical protein. --
SEQUENCE 384 AA; 42398 MW; BB94D063B3D0003B CRC64;
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01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Hypothetical protein B13A5.030.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30.0%; Score 6; DB 2;
100.0%; Pred. No. 91;
ative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=Embryo;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 100.
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Q87IP7
ID Q87IP7
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             ID DAYCO DAY
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MEDLINE=22188257; PubMed=12477932;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .,
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14-APR-2004 (TrEMBLrel. 27, Last sequence update)
14-APR-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Missing (in Ref. 2)
V -> M (in Ref. 2).
P -> S (in Ref. 4).
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100.0%; Pred. No. 91;
iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    352 AA.
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S58426; AAB19896.1; -. S58422; AAB19896.1; JOINED. S58423; AAB19896.1; JOINED.
                                                                       S58424; AAB19896.1; JOINED. S58425; AAB19896.1; JOINED.
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                                                                                                                     PIR; A34672, A34672.
PIR; S17313; S17313.
PDB; 10CF; NMR; e216-282.
TRANGFAC; T00661; -.
MGD; MGI:101893; Pou5f1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.00
Best Local Similarity 6; Conservative
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Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     232
250
261
264
352 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LETMFL 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH68268
AAH68268;
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CONFLICT
CONFLICT
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                                               EMBL;
EMBL;
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                                                                                                  EMBL;
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AAH68268
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ò g Gaps

0;

0; Indels

Length 352;

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Gaps

0;

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Pfam; PF03137; OATP; 1.
TIGRFAMS; TIGR00805; oat; 1.
PROSITE; PS50850; MFS; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-2004 (TrEMBLrel. 28, 01-OCT-2004 (TrEMBLrel. 28, 01-OCT-2004 (TrEMBLrel. 28,
                                                                                                                                                                                                                                                                                                              6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mesoplasma florum L1.
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Best Local Similarity
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[2]
SEQUENCE FROM N.A.
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SEQUENCE 478 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pyruvate kinase.
ORFNames=Mf1175;
                               TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=L1;
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A Klausher R.D., Feingold E.A., Grouse L.H., Derge J.G.,

A Klausher R.D., Collins F.S., Wagner L., Shemen C.M., Schuler G.D.,

A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

B Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

A Batchenco L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

B Raplecon M., Soares M.B., Bonaldo M.E., Casavant T.L., Scheez T.E.,

RABA S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RABA S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RABA S.S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Tallalon D.K., Muzny D.M., Sodergren B.J., Lu X., Glabs R.A.,

RA Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Gones S.J., Marra M.A.;

"Generation and initial analysis of more than 15,000 full-length human RT and mouse cDNA sequences.",

Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                     SEQUENCE FROM N.A.
STRAIN=RIND 210633 / Serotype 03:K6;
STRAIN=RIND 2210633 / Serotype 03:K6;
MRDLINE=22508454; PubMed=12620739;
Makino K., Oshima K., Kurokawa K., Yokoyama K., Uda T., Tagomori K.,
Iijima Y., Najima M., Nakano M., Yamashita A., Kubota Y., Kimura S.,
Yasunaga T., Honda T., Shinagawa H., Hattori M., Iida T.;
"Genome sequence of Vibrio parahaemolyticus: a pathogenic mechanism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                     Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales; Vibrionaceae; Vibrio. WCBI_TaxID=670;
                                                                                                                                                                                                                                                                                                                                                                                                                        DB 2; Length 411;
                                                                                                                                                                                                                                                                                                                                                                                                                      30.0%; Score 6; DB 2; Length 411;
100.0%; Pred. No. 1e+02;
Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                               distinct from that of V. cholerae.";
Lancet 361:743-749(2003).

EMBL, AP0050081

GO, GO:0016020; C:membrane; IEA.

InterPro; IPR003838; DUF214.

Pfam; PF02687; FteX; 1.

Complete proteome; Hypothetical protein.

SEQUENCE 411 AA; 45224 MW; 99CB9EZETF7AD331 CRC64;
           01-JTN-2003 (TrEMBLrel. 24, Created)
01-JTN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Hypothetical protein VPA0559.
OrderedLocusNames=VPA0559;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  438 AA.
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Name=SLCO1A2;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 100.
Matches 6; Conservative
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                                                                                           Vibrio parahaemolyticus.
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Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2; Length 478;
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Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; AE017263; AAT75532.1; -.
Strausberg R.;
Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                          438 AA; 49086 MW; 8367CC253A77D433 CRC64;
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Entomoplasmataceae, Mesoplasma.
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Pyruvate kinase (EC 2.7.1.40).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation update)
                                           GWBL, BC044452; AAH42452.1; -... GO; GO:0016021; C:integral to membrane; IEA. GO; GO:0016021; C:integral to membrane; IEA. GO; GO:0005215; F:transporter activity; IEA. GO; GO:006810; P:transport; IEA. InterPro; IPR004114; MFS. InterPro; IPR004157; OATP_Cterm. InterPro; IPR004156; OATP_Nterm.
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100.0%; Pred. No. 1.2
tive 0; Mismatches
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535 QMLETM 540
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                                                    RESULT 19
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                                                                                                                                                                            Westberg J., Persson A., Holmberg A., Goesmann A., Lundeberg J., Johansson K.-E., Pettersson B., Uhlen M.; "The genome sequence of Mycoplasma mycoides subsp. mycoides SC type strain PGIT, the causative agent of contagious bovine pleuropneumonia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                          GENER). "GENERALIVE AGENT OF CONTRACTORS DOVING PLEUTOPHEUMONIA (CREPP).";
GENOME Res. 14:221-227(2004).
-!- CATALYTIC ACTIVITY: ATP + Bytuvate = ADP + phosphoenolpyruvate.
-!- COFACTOR: Requires magnesium and potassium (By similarity).
-!- PATHWAY: Glycolysis; final step.
-!- SIBUINAT: Homotetramer (By similarity).
-!- SIMILARITY: Belongs to the pyruvate kinase family.

BMBL; BX842642; CAB76902.11. -
GO; GO:0004743; F:pyruvate kinase activity; IEA.
GO; GO:0016740; F:transferase activity; IEA.

BITHERPEO; IFR001267; Pyruvate_kinase.

PEAM; PF00224; PK; 1.
Name=pyk; OrderedLocusNames=MSC 0261;
Mycoplasma mycoides (subsp. mycoides SC).
Bacteria; Firmicutes; Mollicutes; Mycoplasma.
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Bacteria, Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma.
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ProDom; PD001009; Pyruvate kinase; 2.
TIGRFAMs; TIGR01064; pyruv kin; 1.
Complete proteome; Glycolysis; Kinase; Magnesium; Pyruvate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30.0%; Score 6; DB 2; Length 478; 100.0%; Pred. No. 1.2e+02; ive 0; Mismatches 0; Indels
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BMBL; BX842642; CAE76902.1; -.

Kinase; Pyruvate; Transferase.

SEQUENCE 478 AA; 53817 MW; 1CE570E98A6305C9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               478 AA; 53817 MW; 1CE570E98A6305C9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-MAR-2004 (TrEMBLrel. 27, Created)
02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
13-ARR-2004 (TrEMBLrel. 27, Last annotation update)
Pyruvate kinase (EC 2.7.1.40).
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Matches 6; Conservative
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Matches 6; Conserv
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                                                                                                              SEQUENCE FROM N.A.
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                                                                  NCBI_TaxID=44101;
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                                                                                                                                                       PubMed=14762060;
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PubMed=14762060;
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RX MEDLINE=22789168; PubMed=12907728;
RA BL-Sayded N.M.A., Ghedin E., Song J., MacLeod A., Bringaud F.,
RA BL-Sayded N.M.A., Ghedin E., Song J., Hou L., Taylor S., Tweedie A.,
RA Larkin C., Wanless D., Peterson J., Hou L., Taylor S., Tweedie A.,
RA Blandin G., Bartholomeu D., Simpson A.J., Kaul S., Zhao H., Pai G.,
RA Aken S., Utterback D., Simpson A.J., Waul S., Zhao H., Pai G.,
RA Adams M.D., Ferser C.M., Donelson J.E., White O., Melville S.,
RA Adams M.D., Fraser C.M., Donelson J.E., White O., Melville S.,
RT "The sequence and analysis of Trypanosoma brucei chromosome II.";
RY Nucleic Acids Res. 31:4865-4863 (2003).
C.-! SIMILARITY: Belongs to the Ser/Thr protein kinase family.
DR GO: GO:000524; F:ATP binding: IBA.
DR GO: GO:000524; F:ATP binding: IBA.
DR GO: GO:000468; P:Protein serine-threonine kinase activity; IEA.
DR GO: GO:0006468; P:protein amino acid phosphorylation; IEA.
DR GO: GO:0006409; Pkinase: I.
DR RICE-PRO: IPRO00719; Protekinase:
DR PROSITE: PSO0101; PROTEIN KINASE ATP; UNKNOWN_1.
DR PROSITE: PSO0103; PROTEIN KINASE ATP; UNKNOWN_1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .,
                                                      05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
16-J01-2004 (TrEMBLrel. 27, Last annotation update)
Name=1(2)01289;
Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Ephydroidea; Endoptera; Brachycera; Muscomorpha;
Phydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30.0%; Score 6; DB 2; Length 758; 100.0%; Pred. No. 1.8e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
Manning G., Micklem D.R., Krasnow M.A.;
Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
EMBL, AF216976; AAF34750.1; -
InterPro, IPR006663; Thioredox_dom2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              758 AA; 88075 MW; CB31F4196C4BA315 CRC64;
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Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Protein kinase, putative. ORFNames=Tb927.2.4200;
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PRELIMINARY;
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Gaps

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30.0%; Score 6; DB 2; Length 1345; 100.0%; Pred. No. 2.9e+02; tive 0; Mismatches 0; Indels

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Query Match 30.0
Best Local Similarity 100.
Matches 6; Conservative
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R GO; GO: 0005622; C:intracellular; IEA.

R GO; GO: 0016205; C:membrane; IEA.

R GO; GO: 0016205; C:membrane; IEA.

R GO; GO: 0016301; F:Kinase activity; IEA.

R GO; GO: 0003700; F:transcription factor activity; IEA.

R GO; GO: 000156; F:two-component response regulator activity; IEA.

R GO; GO: 0000155; F:two-component signal transduction system (p. .; IEA.)

R GO; GO: 0000156; F:two-component signal transduction system (p. .; IEA.)

R GO; GO: 0000156; F:two-component signal transduction system (p. .; IEA.)

R GO; GO: 0000156; F:two-component signal transduction system (p. .; IEA.)

R GO; GO: 0000156; F:two-component signal transduction system (p. .; IEA.)

R InterPro; IPR001366; H:E-kina.

R InterPro; IPR001005; H:H:E-kina.

R InterPro; IPR001005; H:H:E-kina.

R InterPro; IPR001100; Reg_prop.

R InterPro; IPR01110; Reg_prop.

R InterPro; IPR011103; Y Y Y.

R Ffam; PF00152; H:H Arac; 2.

R Ffam; PF00155; H:H ARAC; 3.

R Ffam; PF00155; H:HARAC.

R Ffam; PF00155; H:HARAC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRANIE-VID-SAB2 / ATCC 29148;
MEDLINE=22550858; PubMed=12663928;
Xu J., Bjursell M.K., Himrod J., Deng S., Carmichael L.K.,
Chiang H.C., Hooper L., Gordon J.I.;
"A genomic view of the human-Bacteroides thetaiotaomicron symbiosis.";
Science 299:2074-2076(2003)
                                                                                                                        Gaps
  ATP-binding; Kinase; Serine/threonine-protein kinase; Transferase.
SEQUENCE 1037 AA; 113326 MW; A87B8C4442745274 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -!- SIMILARITY: Contains 1 HTH araC/xylS-type DNA-binding domain.
-!- SIMILARITY: Contains 1 histidine kinase domain.
EMBL; AE016942; AA078891.1; -.
                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-CTT-2003 (TrEMBLrel. 25, Last annotation update)
Two-component system sensor histidine kinase/response regulator,
                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PS50109; HIS KIN; 1.
PROSITE; PS501124; HTH_ARAC_FAMILY 2; 1.
PROSITE; PS50110; RESPONSE REGULATORY; 1.
Complete proteome; DMA-binding; Kinase; Phosphorylation; Sensory transduction; Transcription regulation; Transferase. SEQUENCE 1345 AA; 155269 MM; 7247BDDA9C7FADAB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bacteria; Bacteroidetes; Bacteroides (class); Bacteroidales;
Bacteroidaceae; Bacteroides.
                                                                        Length 1037;
                                                                                                                     0; Indels
                                                                      DB 2; Len
                                                                                                                                                                                                                                                                                                                                       PRT; 1345 AA
                                                                      30.0%; Score 6; DB 2
100.0%; Pred. No. 2.3
.ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PD000039; Response_reg; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ('one-component system').
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacteroides thetaiotaomicron.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00342; HTH ARAC; 1.
SMART; SM00448; REC; 1.
                                                                      30.08;
                                                                                            Local Similarity 100.
nes 6; Conservative
                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OrderedLocusNames=BT3786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P08402; 1B00
                                                                                                                                                                     11 VCQMLE 16
                                                                                                                                                                                                                  85 VCOMLE 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=818;
                                                                        Query Match
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                                                                                                                     Matches
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- PTM: Specific enzymatic cleavages yield mature proteins including nonstructural protein NS-M, glycoprotein G1, and glycoprotein G2.-!- SIMILARITY: Belongs to the orthobunyaviruses M polyprotein family.
                                                                                                                                                                                                                                                                                                                                                                                                    Bunyavirus germiston.
Viruses; ssRNA negative-strand viruses; Bunyaviridae; Orthobunyavirus
NCBI_TaxID=11574;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=89021381; PubMed=3176688; Pardigon N., Vialat P., Gerbaud S., Girard M., Bouloy M.; Pardigon N., Vialat P., Gerbaud S., Girard M., Bouloy M.; "Nucleotide sequence of the M segment of Germiston virus: comparison of the M gene product of several bunyaviruses."; Virus Res. 11:73-85(1988)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                  01-0CT-1989 (Rel. 12, Created)
01-0CT-1989 (Rel. 12, Last sequence update)
05-0UL-2004 (Rel. 44, Last annotation update)
M Polyprotein precursor [Contains: Glycoprotein G2; Nonstructural protein NS-M; Glycoprotein G1].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (Potential). (Potential).
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Glycoprotein G2.
Nonstructural protein NS-M.
Glycoprotein G1.
Potential.
Potential.
Potential.
Potential.
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InterPro; IPR005168; Bunya_G2.
Pfam; PF03557; Bunya_G1; 1.
Pfam; PF03563; Bunya_G2; 1.
Glycoprotein; Nonstructural protein; Polyprotein; Signal; Transmembrane. 1 21
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                                                                                                                                                                                  PRT; 1437 AA
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100.0%; Pred. No. 3.1
tive 0; Mismatches
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                                                                                                                                                                                     STANDARD;
                                               1202 VCQMLE 1207
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Best Local Similarity
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11 VCOMLE 16
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RADAMER M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,

RADAMER M.D., Celniker S.E., Holt R.A., Hoskins R.A., Galle R.F.,

George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,

RADAMENT G.G., Northand J.R., Plazel R.G., Champe M., Pfeiffer B.D.,

RADAMEN M.D., Perint B.C., Helt G., Nelson C.R., Gabor G.L.,

RADAMEN M., Benos P.V., Berand B.P., Bandari D., Bolchakov S.,

RADAMI J.F., Agbayani A., Barel R.G., Champe M., Pfeiffer B.D.,

RADAMI J.F., Agbayani A., Barel R.G., Champe M., Pfeiffer B.D.,

RADAMI J.F., Benos P.V., Berman B.P., Bandari D., Bolchakov S.,

RADAMI J.F., Benos P.V., Berman B.P., Bandari D., Bolchakov S.,

RADAMI J.F., Dence P.V., Berman B.P., Brottier P., Chandra I.,

RADAMI J.F., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,

BOKKOVA D., Bolcher A., Deng Z., Mays R.D., Dew I., Dietz S.M.,

RADAGON K., Dough LE., Downes M., Dugan-Rocha S., Fleischmann W.,

RADAGON K., Cabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,

RADAGON K., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,

RADAMI M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,

RADAMI M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,

RADAMI M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,

RADAMI M., Kalush F., Karpen G.H., Ke Z., Kennison J.A.,

RADAMI S.M., Moyn B., Murphy L., Muzny D.M., Nelson D.I.

RADAMI S.M., Moyn B., Murphy L., Muzny D.M., Nelson D.I.

RADAMI S.M., Moyn B., Murphy L., Muzny D.M., Nelson D.K.

RADAMI S.M., Moyn B., Murphy L., Muzny D.M., Nelson D.K.,

Shiekas R., Taetor C., Turner R., Ventre B., Shen H.,

Shiekas R., Stadiac K.A., Weinschoff G.M., Stupsk M., Shen H.,

Shiekas R., Stadiac K., Sanders R., Ventre B., Shen H.,

Shiekas R., Stadiac K., Sanders R., Ventre B., Shen H.,

Shiekas R., Stadiac K., Weinselm S., Shon W., Shen B.,

Shiekas R., Shadin S., Shan M., Zhou X., Zhu S., Zhu X., Smith H.O.,

Radami S., Shan M., Shon M., Shon S.,

Shen S., Shan M., Shiekas R., Shan M., Shiekas 
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                                                                                                                                         01-072-2000 (TrEMBLrel. 13, Created)
01-072-2000 (TrEMBLrel. 15, Last sequence update)
01-072-2004 (TrEMBLrel. 15, Last annotation update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
1(2) 01289 Jonn (CG9432-pB).
Name=1(2) 01289; ORTNAmes=CG9432;
Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Endopterygota;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. Macklem D.R., Krasnow M.A.;
Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                       PRT; 1703 AA
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MEDLINE=22426065; PubMed=12537568;
                                                                                                    PRELIMINARY;
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SETALIPLE-TY2 / ATCC 700931;
STRAINE-TY2 / ATCC 700931;
MEDLINE=22531367; PubMed=12644504;
Deng W., Liou S.-T., Plunkett G. III, Mayhew G.F., Rose D.J.,
Burland V., Kodoyianni V., Schwartz D.C., Blattner F.R.;
"Comparative genomics of Salmonella enterica serovar Typhi strains Ty2 and CT18.";
SEQUENCE FROM N.A.
MEDINDE=22426070; PubMed=12537573;
Kaminker J.S., Bergama C.M., Kronmiller B., Carlson J., Svirskas R., Patel S., Frise B., Wheeler D.A., Lewis S.E., Rubin G.M., Ashburner M., Celniker S.E.;
The transposable elements of the Drosophila melanogaster euchromatin:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                          MEDLINE=22426069; PubMed=12537572;
Misra S., Grosby M.A., Mungall C.J., Matthews B.B., Campbell K.S., Hradecky P., Huang Y., Kaminker J.S., Millburn G.H., Prochnik S.E., Smith C.D., Tupy J.L., Whitfied E.J., Bayrakraroglu L., Berman B.P. Bettencourt B.R., Celniker S.E., de Grey A.D., Drysdale R.A., Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q., Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacteria, Proteobacteria, Gammaproteobacteria, Enterobacteriales,
Enterobacteriaceae, Salmonella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Annotation of the Drosophila melanogaster euchromatic genome: a
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SEQUENCE 1703 AA; 196579 MW; DAA9C2463426ABDA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; AFC16973; AAF34746.1; -.
EMBL; AE003790; AAN16126.1; -.
HSSP; Q57755; 1F05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FlyBase, FBgn0010482, 1(2)01289.
GO; GO:0005489, F:electron transporter activity, IEA.
GO; GO:0006118, P:electron transport, IEA.
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Last annotation update)
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                                                                                                                                                                a genomics perspective.";
Genome Biol. 3:RESEARCH0084-RESEARCH0084(2002).
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InterPro, IPR006663, Thioredox_dom2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            systematic review.";
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Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AY192393; AA045868.1; -.
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MEDLINE=22541850; PubMed=12655080;
MEDLINE=22541850; PubMed=12655080;
Pacz A., Nuncz C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AY192392; AA045867.1; -.
NON_TER 28
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus:
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment).
Rabies virus.
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01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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SEQUENCE FROM N.A.
MEDLINE=22541850; PubMed=12655080;
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Matches 5; Conservative
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Rabies virus.
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MEDLINE=22541850; PubMed=12655080;

Paez A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL, AN192397; AA045872.1;

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MEDIJNE=22541850; PubMed=12655080;
MEDIJNE=22541850; PubMed=12655080;
Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizoctics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84.795-802 (2003).
EMBL; AY192395; AAO45870.1; -.
NON_TER 28
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
                           EMBL, AE016844; AA070500.1; -.
Hypothetical protein.
SEQUENCE 23 AA; 2797 MW; 9EEB0BCB88CB36AA CRC64;
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01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment).
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  J. Bacteriol. 185:2330-2337(2003)
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Rabies virus.
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Best Local Similarity
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MEDLINE=22541850; PubMed=12655080;

MEDLINE=22541850; PubMed=12655080;

Medlecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL; AY192387; AA045862.1; -.

NON TER 28 28

SEQUENCE 28 AA; 2938 MW; 2B2237A9ABBF3C6A CRC64;
                                          Paez A., Nunez C., García C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Vizol. 84:795-802(2003).
EMBL; AX192388; AA045863.1; -.
NON TER 28 28
SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3CGA CRC64;
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Rhabdoviridae; Lyssavirus.
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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Rabies virus.
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Rabies virus.
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MEDLINE=22541850; PubMed=12655080;

Paez A., Nunez C., Garcia C., Ball J.;

Paez H., Nunez C., Garcia C., Espizootics in Colombia: evidence for "Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 841795-802 (2003).

FMBL; AY192390; AA045865.1;

NON TER 28

SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
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Paez A., Nunez C., Gazcia C., Boshell J.;
"Molecular epidemiology of rabies epizoctics in Colombia: evidence for
human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
BMB.; AY192389; AAO45864.1; -
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NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
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MEDIJINE=22541850; PubMed=12655080;

MeDIJINE=22541850; PubMed=12655080;

Paez A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizoctics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL; AY192383; AAO45858.1; -.

NON_TER 28 28
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MEDLINE=22541850; PubMed=12655080;

MEDLINE=22541850; PubMed=12655080;

Paez A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizoctics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84.795-802(2003).

EMBL; AY192384; AA045859.1; -.

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Rhabdoviridae; Lyssavirus.
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Rhabdoviridae; Lyssavirus.
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment).
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MEDLINE=22541850; PubMed=12655080;

MEDLINE=22541850; PubMed=12655080;

Pagez A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rables epizootics in Colombia: evidence for human and dog rables associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL; ANJ92380; AAO45855.1; -.

NON TER 28 A2; 3010 MW; 2E3637A9AACA3CGA CRC64;
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MEDLINE=22541855; PubMed=12655080;
MEDLINE=22541855; PubMed=12655080;
Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rables epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AY192381; AA045856.1; -.
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Rhabdoviridae; Lyssavirus.
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MEDLINE=22541850; PubMed=12655080;
Pacz A., Nunez C., Garcia C., Boshell J.;
Pacz A., Nunez C., Garcia C., Boshell J.;
Wolecular epidemiology of rables epizootics in Colombia: evidence for human and dog rables associated with bats.";
J. Gen. Virol. 84:795-802(2003)
BMBL; AY192374; AA045849.1;
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SEQÜENCE 28 AA; 2998 MW; 2E3147A9AACA3CGA CRC64;
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Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizocics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
BMBL, AX192373; AAO45848.1;
NON TER 28
SEQÜENCE 28 AA; 3010 MW; 2E3637A99AACA3C6A CRC64;
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Rhabdoviridae; Lyssavirus.
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J. Gen. Virol. 84:795-802(2003).
EMBL; AX192375; AA045850.1; -.
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"Molecular epidemiology of rables epizootics in Colombia: evidence for human and dog rabines associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL, AX192379; AAO45854.1;
NON TER 28
SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
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MEDIJIRE=22241850; PubMed=12655080;
Pacz A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84.795-802(2003).

EMBL: AY192378; AAO45853.1;
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MEDLINE=22541850; PubMed=12655080;
Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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SEQUENCE FROM N.A.

MEDLINE=22541850; PubMed=12655080;

MEDLINE=22541850; PubMed=12655080;

Pacz A., Nunez C., Garcia C., Eables epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

BMBL; AV192413; AAO31968.1; -.

NON TER 28 28

SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3CGA CRC64;
                                                                                                                                                                                                                                                                        MEDLINE=22541850; PubMed=12655080;
MEDLINE=22541850; PubMed=12655080;
Paez A., Nunez C., Garcia C., Barcia C., Expises epizootics in Colombia: evidence for "Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84.795-802(2003).
EMB. AX192415; AAO31970.1; -.
NON TER 28 28
SEQÜENCE 28 AA; 2970 MW; 3E20A8A9BAACA3C6A CRC64;
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Rhabdoviridae; Lyssavirus.
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Rhabdoviridae; Lyssavirus.
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01-UTN-2003 (TrEMBLrel. 24, Created)
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MEDLINE=22541850; PubMed=12655080; Pacz A., Nunez C., Garcia C., Boshell J.; Pacz A., Nunez C., Garcia C., Boshell J.; Pacz A., Nunez cardia cardia cardia cardia associated with bats."; J. Gan. Virol. 84:795-8022003). EMBL; AY192371; AA045846.1; ... NON TER 28 28 28 SEQUENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64; SEQUENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64; Aabs
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MEDLINE=22841850; PubMed=12655080;
MedLINE=22841850; PubMed=12655080;
Macaz A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rables epizootics in Colombia: evidence for human and dog rables associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AY192372; AA045847.1; -.
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Best Local Similarity 100.0%; Pred. No. 1.4e+02;
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SEQUENCE FROM N.A.
MEDLINE=22541856; PubMed=12655080;
Pacz A., Nunez C., Garcia C., Boshell J.;
Pacz A., Nunez C., Garcia C., Boshell J.;
Molecular epidemiology of rabies epizoctics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(203).
EMBL; AY192412; AA031967.1; -.
NON. TER 28 28
SEQUENCE 28 AA; 2996 MW; 2F7337A9AACA3C6A CRC64;
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"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.",
J. Gen. Virol. 84:792-802(2003).
EMBL; AY192410; AA031965.1; -.
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MEDIAINE=22541850; PubMed=12655080;

Paez A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBI; AY192409; AA031964.1; -.

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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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SEQUENCE FROM N.A.

MEDLINE=22541850; PubMed=12655080;

PAGE A., Nunez C., Garcia C., Boshell J.;

PAGE A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies as associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL; AY192408; AA031963.1; -.

NON TER 28

SEQUENCE 28 AA; 3310 MW; 2E3637A9AACA3C6A CRC64;
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SEQUENCE FROM N.A.
MEDLINE=22541850; PubMed=12655080;
MEDLINE=22541850; PubMed=12655080;
Pacz A., Nuncz C., Garcia C., Boshell J.,
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.",
human and dog rabies associated with bats.",
EMBL, AY192407; AA031962.1, -.
NON TER 28
SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
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01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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SEQUENCE FROM N.A.
MEDLINE=22541850; PubMed=12655080;
Paez A., Nunez C., Garcia C., Boshell J.;
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"Molecular epidemiology of rabies epizootics in Colombia: evidence for
human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL, AX192406; AA031961.1; -.
NON_TER 28
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MEDLINE=22541850; PubMed=12655080;
Pacz A., Nunez C., Garcia C., Boshell J.;
Pacz A., Nunez C., Garcia C., Eabines epizoctics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
J. Gen. Virol. 94:795-802(2003).
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment)
Rabies virus.
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MEDLINE=22541850; PubMed=12655080;
MEDLINE=22541850; PubMed=12655080;
Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AX192403; AAO31958-1; -.
NON_TER 28 28
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
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Rhabdoviridae; Lyssavirus.
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01-UN-2003 (TrEMBLrel. 24, Last sequence update)
01-UN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment).
Rabies virus.
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Best Local Similarity 100.0%; Pred. No. 1.4
Matches 5; Conservative 0; Mismatches
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Pacz A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
BMB.; AF269292; AAF73515.1; -.
NON TER 28 28
SEQÜENCE 28 AA; 3024 MW; ZE24A7A9AACA3CGA CRC64;
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"Molecular epidemiology of rables epizootics in Colombia: evidence for human and dog rables associated with bats.";
J. Gen. Virol. 84.795-802 (2003).
EMBL, ARZ62291, AAF73514.1;
PIR, PQ0369; PQ0369.
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Rhabdoviridae; Lyssavirus.
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01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0CT-2000 (TrEMBLrel. 15, Last annotation update)
L protein (Fragment).
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01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
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Rabies virus.
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MEDLINE=22541850; PubMed=12655080;

Pacz A., Nuncar C., Garcia C., Boshell J.;

Pacz A., Nuncar c., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizoctics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

BMBL; AY192401; AAO31956.1; -.

NOM TER 28

SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
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MEDLINE=2254185; PubMed=12655080;
MEDLINE=2254185; PubMed=12655080;
Malocular C., Garcia C., Boshell J.;
"Molecular epidemiology of trabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL, YX19240-2, AMO31557.1;
NON TER 28 28
SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3CGA CRC64;
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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01-UUN-2003 (TrEMBLrel. 24, Created)
01-UUN-2003 (TrEMBLrel. 24, Last sequence update)
01-UUN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment).
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01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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NCBI TaxID=11292;
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SEQUENCE FROM N.A.

MEDIJNE=22541850; PubMed=12655080;

MEDIJNE=22541850; PubMed=12655080;

Pagez A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802 (2003).

EMBL, AF189359; AAF13914.1;

NON_TER
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"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AF189358; AAF13913.1; -.
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MEDLINE=22541850; PubMed=12655080;

Paez A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).
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Rhabdoviridae; Lyssavirus.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
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MEDLINE=22541850; PubMed=12655080;
  Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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MEDIJIE=22541850; PubMed=12655080;

Medilie=2.4. Numez C., Garcia C., Boshell J.;

Maca A., Numez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizoctics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802 (2003).

J. Gen. Virol. 84:795-802 (2003).

EMBI, AF189360; ARF13915.1; -.

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SEQUENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
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25.0%; Score 5; DB 2; Length 28;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 5; Conservative 0; Mismatches 0; Indels
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01-MAY_2000 (TrEMBLrel. 13, Last sequence update)
01-MAY_2000 (TrEMBLrel. 13, Last annotation update)
L protein (Fragment).
Rabies virus.
Viruses; ssRNA negative-strand viruses; Mononegavirales;
                                                                                                                                                          Viruses; ssNA negative-strand viruses; Mononegavirales; Rhabdoviridae; Lyssavirus. NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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                                       Q9QD10;
01-MAX-2000 (TrEMBLrel. 13, Created)
01-MAX-2000 (TrEMBLrel. 13, Last sequence update)
01-MAX-2000 (TrEMBLrel. 13, Last annotation update)
L protein (Fragment).
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01-MAY-2000 (TYEMBLRE1. 13, Last sequence update)
01-MAY-2000 (TYEMBLRE1. 13, Last annotation update)
L protein (Fragment).
Rabies virus.
                    28 AA.
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100.0%; Pred. No. 1.4
Live 0; Mismatches
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                       Q9QD10
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Q9QD10
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MEDLINE=22541850; PubMed=12655080;
Paez A., Nunez C., Garcia C., Boshell J.;
Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of trables epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL: AF189353; AAF13908.1;
NON_TER 28
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Paez A., Nunez C., Garcia C., Boshell J.;
Paez A., Nunez C., Garcia C., Boshell J.;
Imolecular epidemiology of rabies epizocitcs in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBI; AF189354; AAF189309.1; -.

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Rhabdoviridae; Lyssavirus.
NCBL_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
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01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
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100.0%; Pred. No. 1.4
rative 0; Mismatches
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Best Local Similarity 100.
Matches 5; Conservative
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                        PRGAP 25
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Q9QD17
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MEDIJINE=22541850; PubMed=12655080;
MEDIJINE=22541850; PubMed=12655080;
Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of trabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBI, AF189355; AAF13910.1;
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MEDLINE=22541850; PubMed=12655080;
MEDLINE=22541850; PubMed=12655080;
Pacz A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
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Rhabdoviridae; Lyssavirus.
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                                                                                      SEQUENCE FROM N.A.

MEDLINE=22541850; PubMed=12655080;

MEDLINE=22541850; PubMed=12655080;

Pacz A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizoctics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen Virol. 84:795-802 (2003).

EMBL; AF189352; ARF13907.1;

NON_TER
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MEDLINE=22541850; PubMed=12655080;

MEDLINE=22541850; PubMed=12655080;

Paca A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL, AI183349; AAF13904.1; -.

NON TER

SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
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                                         Viruses; ssRNA negative-strand viruses; Mononegavirales;
Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
NCBI TaxID=11292;
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01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
1 protein (Fragment).
Rabies virus.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
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MEDLINE-22541850; PubMed=12655080;

Mezoline-22541850; PubMed=12655080;

Mezoline C., Garcia C., Boshell J.;

"Molecular epidemiology of trabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

BMB.; AF189347; AF13902.1;

NON TER

SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
Paez A., Nnnez C., Garcia C., Boshell J.,
"Molecular epidemiology of rabies epizootics in Colombia: evidence for
human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL, AF189348; AAF135-03.1;
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MEDLINE-22241850; PubMed=12655080;

Paez A., Nunez C., Garcia C., Boshell J.;

Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL; AF189346; AAF13901.1;

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SEQUENCE 28 AA; 3010 MW; ZE3637A9AACA3C6A CRC64;
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Rhabdoviridae; Lyssavirus.
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Rhabdoviridae; Lyssavirus.
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MEDLINE=22541850; PubMed=12655080;

Medecular extraction C., Boshell J.;

Molecular epidemiclogy of rabies epizoctics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL, API89345; ARF13900.1; -.

SEQUENCE 28 A3; 3010 MW; 2E3637A9AACA3C6A CRC64;
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I protein (Fragment).
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Viruses; ssRA negative-strand viruses; Mononegavirales;
Rhabdoviridae; Lyssavirus.
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shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and vaginitis), immune disorders (e.g., congenital and acquired immune disorders (e.g., anaemia), cardiovascular disorders, respiratory disorders (e.g., anaemia), cardiovascular disorders, respiratory disorders. Ovarian antigen polypoptides and unimary system disorders. Ovarian antigen polypoptides and polymorlectides may also be used in screening for compounds which modulate ovarian antigen expression or activity. The polynuclectides may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Isolated nucleic acid molecules encoding novel ovarian polypeptides, useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian cancer), immune disorders, cardiovascular disorders and neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to 2175 novel human ovarian antigens (ABP41054-ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also encompasses polypeptides 90% identical and polynuclectides 95% identical to the sequences of the invention. The invention additionally relates to recombinant vectors and host cells comprising human ovarian antigen polynuclectides and polypeptides in diagnosing, of ovarian antigens propagates and polypeptides in diagnosing, treating, prognosing or preventing various ovary and/or breast cancer, and metastatic tumours of ovarian or breast oxigin, reproductive system disorders (e.g., infertility, disorders of pregnancy, anovulation, polycystic ovary syndrome, ovarian cysts, and dysmenorrhoea), endocrine disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic
                                                                                                                                                                                                                                                                                                                                           Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour; ovarian cancer; breast cancer; tumour; reproductive system disorder; infertility; pregnancy disorder; anovulation; polycystic ovary syndrome; PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection; inflammatory condition; immune disorder; blood disorder; infection; cardiovascular disorder; respiratory disorder; neurological disorder; gastrointestinal disorder; urinary system disorder; drug screening; gene therapy; chromosome mapping; forensic analysis; antibody preparation; cytostatic; immunomodulatory; neuroprotective; antibiliammatory; gynaecological; reproductive.
Aam18310 Peptide #
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
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                                                                                                                                                                                                                                                                    22-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Birse CE,
  in in
                                                                                                                                                                                                                              ABP43209;
                                                                                                                                               RESULT 1
                                                                                                                                                                    ABP43209
  99
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This invention describes novel nucleic acid (cDNA) sequences (A) which have anticancer activity and are highly expressed in ovarian tumor tissue (and some also in testis and breast cancer tissue). The products of the invention can be used for gene therapy. (A) are used (i) for recombinant expression of polypeptides (B) and (ii) to isolate complete genes. (B) expression of polypeptides (B) and (ii) to isolate complete genes. (B) are used (i) to identify agents suitable for treatment of ovarian cancer; (ii) directly for treating this form of cancer (including expression from gene therapy vectors) and (iii) for generation of specific antibodies. (A) are identified by assembling ESTS (expressed sequence tags) from a particular tissue type before comparison of expression pattents. This allows a significantly longer fragment of the gene to be revealed, so should reduce the number of failures associated with the fact that ESTS from different libraries may represent different parts of the same cunknown gene, distorting the estimated frequency of occurrence in a particular tissue. AAY76505-Y76638 represent protein fragments encoded by the charm ovarian tumor cDNA library derived EST fragments represented in
                                                                                                                                                                                                                                                               ö
further be used for gene therapy, chromosome mapping, in the identification of individuals and in forensic analysis, and the polypeptides may be used as food additives or to prepare antibodies useful in disease diagnosis, drug targeting and phenotyping. The present sequence represents a human ovarian antigen of the invention. Note: The special care data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .,
Ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New nucleic acid sequences expressed in ovarian, and some other, cance tissues, and derived polypeptides, for treatment of ovarian cancer and
                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dahl
                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Expressed sequence tag; EST; human; ovarian tumor; anticancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pilarsky C,
                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                      Length 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human ovarian tumor EST fragment encoded protein 117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hinzmann B, Schmitt A,
                                                                                                                                                                                                                        DB 5;
                                                                                                                                                                                                                        Score 6; DB 5;
Pred. No. 15;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (META-) METAGEN GES GENOMFORSCHUNG MBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tissues, and derived polypeptides, for identification of therapeutic agents.
                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY76621 standard; protein; 147 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 25; Page 292; 310pp; German.
                                                                                                                                                                                                                        30.0%; Pre-
100.0%; Pre-
0; }
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98DE-01017557.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98DE-01017557
                                                                                                                                                                                                                                                                 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene therapy; treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Specht T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-591920/51.
                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                      15 LETMFL 20
                                                                                                                                                                                                                                                                                                                                         7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; AAZ77497.
                                                                                                                                                                                     Sequence 34 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DE19817557-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rosenthal A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY76621;
                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                          AAY7662.
                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
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ABP97398 standard; protein; 324 AA.

RESULT 4 ABP97398

0;

Gaps

0;

0; Indels

Length 147;

DB 2;

ABP97398;

210 LETMFL 215

g

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This sequence describes novel methods where a genetic selectable marker construct operatively linked to a porcine promoter is introduced into a source of cells that contain porcine stem cells under conditions that allows for differential expression of the marker and hence the selective isolation and/or propagation of desired porcine stem cells. The methods care used to isolate and/or enrich and/or selectively propagate methods bluripotent porcine cells and to genetically andity porcine cells. The embryonic stem cells could be altered so as to not express a cell surface comparane protein that may cause rejection of porcine cells after exentransplantation. Transgenic pigs generated through the modified porcine stem cells are useful for providing organs suitable for transplants. The methods overcome the problem of prior art methods transplants. The methods overcome the problem of prior art methods transplants can cause elimination of stem cells from the culture by inducing their differentiation of stem cells from the culture by specifically describes the use of the porcine Oct-4 promoter
                                                                                                                                                                                                                                                                                                                                                                                  Oct-4; porcine; selectable marker construct; promoter; stem cell; differential expression; selective isolation; pluripotent; propagation; cell surface membrane protein; rejection; xenotransplantation; murine; transgenic pig; organ; transplant; programmed cell death.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Porcine stem cells comprising a marker gene under an Oct-4 promoter.
                            30.0%; Score 6; DB 2
100.0%; Pred. No. 50;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30.0%; Score 6; DB 2
100.0%; Pred. No. 96;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kaplan RA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Fig 2A-C; 69pp; English.
                                                                                                                                                                                                                                     AAY08348 standard; protein; 324 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98WO-US021289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97US-00948113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Baetscher MW, Akiyoshi DE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BIOT-) BIOTRANSPLANT INC
                                                                       6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polynucleotide sequence
                                                                                                                                                                                                                                                                                                                                                Murine Oct-4 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-312473/26.
                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                           27 PRGAPM 32
                                                                                                          1 PRGAPM 6
Sequence 147 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 324 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-PSDB; AAX57201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9919469-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-OCT-1997;
                                                                                                                                                                                                                                                                                                           26-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-APR-1999.
                                                                     Matches
                                                                                                                                                                                                 RESULT 3
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The invention relates to probes for screening embryonic stem (ES) cells. The probes contain polynucleotide sequences from genes designated ES cell associated transcript (EDAT) genes, which are specifically expressed in ES cells. The polynucleotide sequences of 16 murine and human ECAT genes (ABZ75087-ABZ75094, ABZ75096-ABZ75101, ABZ75103-ABZ75104) are fully defined in the specification, as are their encoded proteins (ABP97390-ABP97390). ABP97399-ABP97404, ABP97406-ABP97407). The probes of the invention are used to analyse the expression of ECAT genes in ES cells, providing an efficient means of screening ES cells in order to obtain large amounts of ES cells. The ES cells thus obtained can be used in regeneration therapy of heart muscle and nerve cells for treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Screening probes for identifying genes with embryonic stem cell specific expression for efficient production of stem cells as regeneration therapy treatment of heart and neurological disorders.
                                                                                                                                      Mouse; murine; ES cell associated transcript; ECAT; embryonic stem cell; 
ESC; screening; expression analysis; cell therapy; regeneration therapy; 
tissue regeneration; heart muscle; nerve cell; myocardial infarction; 
neurodegenerative disease; cardiant; neuroprotective; Oct-3/4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              myocardial infarction and degenerative diseases of the nervous system. The present sequence represents murine Oct-3/4 protein which is specifically claimed for use in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 324;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                    Mouse embryonic stem cell Oct-3/4 protein, SEQ ID NO:26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 6;
3. 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 6; DB 6
Pred. No. 96;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 29; Page 78-79; 125pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABG26897 standard; protein; 358 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ilarity 100.0%; P. Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                           (SUMU ) SUMITOMO PHARM CO LTD. (YAMA/) YAMANAKA S.
                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2001; 2001JP-00165927.
                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002WO-JP005350.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30.08;
                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Yamanaka S, Kaiho H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-140475/13.
N-PSDB; ABZ75095.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               210 LETMFL 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15 LETMFL 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 324 AA;
                                                                                                                                                                                                                                                               WO200297090-A1
                                                                                                                                                                                                                               Mus musculus.
                                                                   16-MAY-2003
                                                                                                                                                                                                                                                                                                    05-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABG26897
ID ABG2
XX
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·.

6; Conservative

· 0

Gaps

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0; Indels

Length 324;

DB 2; 5. 96;

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New human GPR38V polypeptide and polynucleotide, useful for treating e.g. bacterial, fungal, protozoal and viral infections, cancers or altergies, as vaccines, and for identifying agonists and antagonists potentially useful in therapy.
                                                            GPR38V; variant; antibacterial; cytostatic; analgesic; antiasthmatic; anti-Parkinsonian; hypertensive; hypotensive; antidiabetic; osteopathic; antiallergic; antimigraine; neuroleptic; nootropic; anticonvulsant; antiulcer; antiemetic; cardiant; vaccine; human.
                                Human GPR38 variant GPR38V polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 26; 32pp; English.
                                                                                                                                                                                                                                                                                                                         (SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                         28-FEB-2001; 2001WO-US006277.
                                                                                                                                                                                                                                                                                           01-MAR-2000; 2000US-00516315.
30-JAN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                           Elshourbagy N, Shabon U;
                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB; AAI66989
                                                                                                                                                                                       WO200164836-A2
                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                         07-SEP-2001.
 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to isolated polymucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polymuclectides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal cativity of (II) ac to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polymucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG0037 represent novel human diagnostic amino acid sequences of the invention. Note: The sequence data for this electronic format directly from WIPO at the princed specification, but was obtained in electronic format directly from WIPO at the princes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
                                                                                                     Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; DB 4; Le.,
Mo. 1e+02;
0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30.0%; Score 6; DB 4
100.0%; Pred. No. 1e+
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 20; SEQ ID NO 57256; 103pp; English.
                                                                   Novel human diagnostic protein #26888.
                                                                                                                                                                                                                                                                                                                                                                             Tang YT;
                                                                                                                                                                                                                                                           30-MAR-2001; 2001WO-US008631.
                                                                                                                                                                                                                                                                                           31-MAR-2000; 2000US-00540217.
23-AUG-2000; 2000US-00649167.
                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                 2001-639362/73.
                                                                                                                                                                                                                                                                                                                                                                               Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                             (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; AAS91084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 358 AA;
                                                                                                                                                                                         WO200175067-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     biodiversity.
                                                                                                                                                         Homo sapiens
                                   18-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                               Drmanac RT,
                                                                                                                                                                                                                           11-OCT-2001.
   ABG26897;
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2001-638956/73.

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This represents a human GPR38 variant (GPR38V) polypeptide. GPR38V can be expressed by standard recombinant methodology. The polynucleotides and polypeptides are used in the treatment of bacterial, fungal, protozoal and viral infections, infections caused by HIV-1 or HIV-2, pain, cancers, diabetes, obesity, anorexia, asthma, Parkinson's disease, acute heart allure, hypertension, urinary retentions, osteoporosis, allergies, ulcers, migraine, psychotic and neurological disorders, or dyskinesias. They are also useful for identifying agonists and antagonists that are potentially useful in therapy, as vaccines to induce immunological response in a mammal. The polypeptides may also be used as immunogens to produce antibodies immunospecific for the polypeptides, and to identify
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mitochondrial; human; screening assay; diabetes mellitus;
Huntington's disease; osteoarthritis;
Leber's hereditary optic neuropathy; LHON;
mitochondrial encephalopathy lactic acidosis and stroke; MELAS;
myoclonic epilepsy ragged red fibre syndrome; MERRF; cancer;
neuroprotective; nootropic; antidiabetic; anticonvulsant; antiarthritic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human heat mitochondrial protein as a therapeutic target SeqID2869.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 4; Length 501;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.4e+02:
                                                                                                                                                                                                                                                                                                                                                                                                                                         30.0%; Score 6; DB 4
100.0%; Pred. No. 1.4
cive 0; Mismatches
                                                                                                                                                                                                                                                                                                                               membrane bound or soluble receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADJ71063 standard; protein; 731 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85 PRGAPM 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 PRGAPM 6
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 501 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADJ71063;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 7
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. 0

Gaps

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Conservative

. 9

Matches

15 LETMFL 20 LETMFL 44

39

RESULT 6 AAG65822

AAG65822 standard; protein; 501 AA.

AAG65822

08:02:19 2004

Tue Oct 26

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The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention is useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher enkaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL16175) and the encoded proteins (ABB57137-ABB72072). The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                          New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signaling and cell-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Recombinant; collagen-like polymer; CLP; tripeptide; helix; membrane; fibre; film; coating; triad sequence; collagen; mammalian; moulding; hydrogel; interchain linkage; colloid suspension.
                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 6414; 21pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30.0%; Score 6; DB 4; Length 1630; 100.0%; Pred. No. 3.6e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (PROT-) PROTEIN POLYMER TECHNOLOGIES INC.
                                                                                                                                                                                          Myers EW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR37732 standard; peptide; 9 AA.
                                                                                                                                                                                       Li PWD,
                                            23-MAR-2001; 2001WO-US009231.
                                                                                   23-MAR-2000; 2000US-0191637P.
11-JUL-2000; 2000US-00614150.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92WO-US009485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91US-00791960
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Collagen-like polymer #15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cappello J, Ferrari FA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1254 OMLETM 1259
                                                                                                                                                                                          Adams M,
                                                                                                                                                                                                                                WPI; 2001-656860/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1993-182496/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                 (PEKE ) PE CORP NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13 QMLETM 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1630 AA;
                                                                                                                                                                                                                                                   N-PSDB; ABL03977
                                                                                                                                                                                                                                                                                                                                     interactions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9310154-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-MAY-1993.
        27-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
07-SEP-1993
                                                                                                                                                                                     Venter JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR37732;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 9
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        à
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention relates to novel mitochondrial targets that can be used for therapeutic intervention in treating a disease associated with altered mitochondrial function. Specifically, it refers to a method for identifying proteins of the human heart mitochondrial proteome that are useful for drug screening assays, as well as therapeutic targets. The present invention describes a method for identifying such proteins that can be used in the treatment of various diseases associated with altered mitochondrial function including diabetes mellitus, Huntington's disease, osteoarthritis, Leber's hereditary optic neuropathy (LHOM), mitochondrial encephalopathy lactic acidosis and stroke (MELAS), myoclonic epilepsy ragged red fibre syndrome (MERRE) or cancer. Accordingly, these
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Identifying a mitochondrial target for drug screening assays and for treating diseases associated with altered mitochondrial function, comprises detecting a modified polypeptide in a sample and correlating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             compositions have neuroprotective, nootropic, antidiabetic, anticonvulsant, antiarthritic, osteopathic, ophthalmological and cytostatic activities. This polypeptide sequence is a human heart mitochondrial protein of the invention.
                                                                                                                                                                                                                                                                                                                                                        Glenn GM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Drosophila; developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
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.. 1.9e+02;
ches 0; Indels
                                                                                                                                                                                                                                                                                                                                                        Taylor SW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Drosophila melanogaster polypeptide SEQ ID NO 6414.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30.0%; Score 6; DB 7
100.0%; Pred. No. 1.9
:ive 0; Mismatches
osteopathic; ophthalmological; cytostatic.
                                                                                                                                                                                                                                                                                                                                                      Gibson BW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 2869; 180pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABB59874 standard; protein; 1630 AA.
                                                                                                                                                                                                                                                                                                                                                      Zhang B,
                                                                                                                                                                                                      12-APR-2002; 2002US-0372843P.
17-JUN-2002; 2002US-0389987P.
20-SEP-2002; 2002US-0412418P.
                                                                                                                                                                04-APR-2003; 2003WO-US010870.
                                                                                                                                                                                                                                                                                                             BUCK INST AGE RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Orosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                   Fahy ED,
                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-845369/78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              542 PRGAPM 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PRGAPM 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    with the disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 731 AA;
                                                                                 WO2003087768-A2
                                                                                                                                                                                                                                                                                   (MITO-) MITOKOR
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                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-2002
                                                                                                                       23-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                       Warnock DE;
                                                                                                                                                                                                                                                                                                                                                   ss,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABB59874;
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ABB59874 RESULT

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Gaps

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Collagen-like
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12-NOV-1991;
05-NOV-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-OCT-1987;
09-NOV-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US5773249-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JUN-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-NOV-1986;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ferrari FA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      fibres, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                           AAW57686;
                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                 Query Match
Best Local &
                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                            RESULT 11
                                                                                                                                                                                                                                                                                                                                                         AAW57686
8
                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention concerns collagen-like polymers having repetitive triads with reduced proline content, and where glycine is the initial amino acid and the subsequent amino acids are varied. The choice of triads utilised in a recombinant collagen-like polymer are chosen in order to affect properties such as helix stability, hydration, solubility, gel point, biodegradation and immunogenicity. Also considered is the level of guanidine and cytosine nucleotides (due to levels of glycine and proline) present in the genes encoding the polymers. As the gene is synthesised there is opportunity for strands to loop out, single-stranded DNA to be
                                                                       collagen-like polymers (CLPs) which consist of repeated tripeptide sequences selected from a wide range of GXY sequences, where X and Y can be any amino acid. These polymers have molecular weights of >30 kD and are able to form helices due to interchain linkages. These polymers pref. contain a proportion of tripeptide triad sequences found in natural collagens, pref. mammalian collagens. The CLPs impart unique characteristics to materials such as fibres, membranes, films, coatings, hydrogels, colloid suspensions and moulded articles. (Updated on 25-MAR-2003 to correct PN field.)
                                                           The sequences given in AAR37718-32 are examples of recombinantly produced
 wt. collagen-like protein polymers - capable of being produced
                                                                                                                                                                                                                                                                                                                                                                                                                                                               collagen; repetitive triad motif; recombinant production; photographic; medical; structural; fibre.
                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Collagen-like polymers comprising repetitive triads - produced in unicellular organisms with improved characteristics, useful in, e.g. photographic and medical fibres.
                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                    25.0%; Score 5; DB 2; Length 9; 100.0%; Pred. No. 1.7e+06; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (PROT-) PROTEIN POLYMER TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Collagen-like GUB sequence motif 5.
                                      Disclosure, Page 12; 82pp; English
                                                                                                                                                                                                                                                                                                                                                         AAR93239 standard; peptide; 9 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Col 6; 43pp; English
            in unicellular microorganisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92US-00972032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90US-00609716
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                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                              5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cappello J, Ferrari FA;
                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
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                                                                                                                                                                                                                       Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                             o,
                                                                                                                                                                                                                                                                      1 PRGAP
                                                                                                                                                                                                                                                                                           PRGAP
                                                                                                                                                                                                 Sequence 9 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-NOV-1991;
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24-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US5496712-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                AAR93239;
   High
                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                 RESULT 10
                                                                                                                                                                                                                                                                                                                                            AAR93239
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excised, recombination events to occur which can result in loss of
segments of the gene, and inefficient transcription and/or translation
(due to the presence of self-complementary sequences), hence genes of the
invention are designed to provide the advantageous properties of
collagen, while at the same time allowing for stable expression of high
collagen, while at the same time allowing for stable expression of high
collagen, pap, GPP, GPG, GPG, GRO, GSP, GLO, GPR, GRK, GAR, GRK,
GPR, GPR, GPR, GPG, GPG, GRO, GRP, GLO, GPR, GPK, GAR, GER,
conferentiatios, finding wide used in photographic, medical, structural
conferences and fibre applications, and are capable of being produced in unicellular
microorganisms at high mol. wts. and in high efficiency. ARR9335-39 are
peptides defining GUB (sic) sequences. The peptides are useful as
complete the porduce antisera or monoclonal antibodies specific to the
sequences which are then used for affinity purification, identification
cof the polymers, etc.. (Updated on 25-MAR-2003 to correct PF field.)
(Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Recombinant collagen-like polymers - useful for making gels, films,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polymer; synthetic polymer; fibre coating;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2; Length 9; 1.7e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25.0%; Score 5; DB 2
100.0%; Pred. No. 1.7
:ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (PROT-) PROTEIN POLYMER TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               prosthetic device; catalytic substance.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Col 6; 93pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW57686 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Collagen-like polymer fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87US-00114618.
88US-00269429.
90US-00609716.
91US-00791960.
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95US-00577046
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cappello J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1998-387004/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 9 AA;
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urine and tissue and to thereby detect the presence of

cancerous cells

SSX88

serum, blood,

Sequence 9 AA;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            peptide fragments of the protein. 1039388 exhibits tissue specific expression in normal adult tissue, but it is also aberrantly expressed in many cancers including tumours of the prostate, bladder, kidney, colon, lung, breast, rectum and stomach. The 1039388 polynucleotide, its related protein and peptide fragments and specific PCR primers are therefore useful for diagnosing and treating cancer. A vector comprising a polynucleotide which encodes a single chain monoclonal antibody, that immunospecifically binds to an 1039388-related protein, and a ribozyme capable of cleaving a polynucleotide having the 1039388 coding sequence, are both useful in the preparation of a composition for treating a patient with a cancer that expresses 1039388. The sequences can be used in diagnostic methods to monitor the level of 1039388 gene products in
materials, as catalytic substances (where the amino acid sequence may specifically chelate a wide variety of elements), as purification media, composites, laminates or adhesives. They may also be combined with inorganic or organic materials such as carbon fibres, nylon fibres, nitrocellulose, etc., as flask coatings or in synthetic matrices for the growth and study of cells, as affinity columns or as supports for biological materials. The polymers have collagen-like properties, but may be easily expressed in micro-organisms in high efficiency. The new sequences can be tailored to give the desired properties
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Monitoring 103P3E8 gene products in sample from patient (suspected of) having cancer, useful for diagnosing, managing or treating cancers, e.g. prostate cancer, comprises determining presence of aberrant 103P3E8 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        103P3E8; prostate; bladder; kidney; colon; lung; breast; rectum; stom tumour; cancer; cytostatic; gene therapy; antibody therapy; ribozyme; single chain monoclonal antibody; serum; blood; urine; tissue; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequences AAU71093-AAU71796 represent the 103P3E8-related protein and
                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Afar DEH;
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                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                          25.0%; Score 5; DB 2; Length 9; 100.0%; Pred. No. 1.7e+06; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human MHC molecule HLA-B35 binding 103P3E8 peptide #20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mitchell SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Raitano AB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 98; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAU71713 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-APR-2001; 2001WO-US012181
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                                                                                                                                                                                                                                                                                   5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      chromosome 9q13-q21
                                                                                                                                                                                                                                            Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                          1 PRGAP 5
                                                                                                                                                                                                                                                                                                                                                                  PRGAP
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                                                                                                                                                                                                      Sequence 9 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jakobovits A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-OCT-2001
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                                                                                                                                                                                                                                                                                                                                        103P3E8; prostate; bladder; kidney; colon; lung; breast; rectum; stomach; tumour; cancer; cytostatic; gene therapy; antibody therapy; ribozyme; single chain monoclonal antibody; serum; blood; urine; tissue; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Monitoring 103P3E8 gene products in sample from patient (suspected of) having cancer, useful for diagnosing, managing or treating cancers, e.g. prostate cancer, comprises determining presence of aberrant 103P3E8 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequences AAU71093-AAU71796 represent the 103P3E8-related protein and
                                        Gaps
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                                       0;
                                                                                                                                                                                                                                                                                                           Human MHC class I molecule HLA-B7 binding 103P3E8 peptide #14.
                                       Indels
   DB 5; Length 9;
.1.7e+06;
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25.0%; Score 5; DB 5
100.0%; Pred. No. 1.7
:ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Raitano AB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 95; 128pp; English.
                                                                                                                                                                                                 AAU71607 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-APR-2001; 2001WO-US012181.
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                                                                                                                                                                                                                                                                       (first entry)
                                       5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                  chromosome 9q13-q21.
 Query Match
Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
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                                                                        1 PRGAP
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                                                                                                                                                                                                                                  AAU71607;
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AAR93209 standard; peptide; 15
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                                                                                                                                                                                                                                             18-AUG-1995;
                                                                                                                                                                                                                                                                     22-AUG-1994;
                                                                        04-OCT-1996
                                                                                                                                                                                             WO9606113-A1
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                                                                                                                                                                      Synthetic.
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                                                AAR93209;
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 RESULT 15
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             AAR93209
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                                                                                                                                                                                                    103P3E8; prostate; bladder; kidney; colon; lung; breast; rectum; stomach; tumour; cancer; cytostatic; gene therapy; antibody therapy; ribozyme; single chain monoclonal antibody; serum; blood; urine; tissue; human; chromosome 9q13-q21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Monitoring 103P3E8 gene products in sample from patient (suspected of) having cancer, useful for diagnosing, managing or treating cancers, e.g. prostate cancer, comprises determining presence of aberrant 103P3E8 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polymucleotide which encodes a single chain monoclonal antibody, that immunospecifically binds to an 103P3E8-related protein, and a ribozyme capable of cleaving a polymucleotide having the 103P3E8 coding sequence, are both useful in the preparation of a composition for treating a patient with a cancer that expresses 103P3E8. The sequences can be used in diagnostic methods to monitor the level of 103P3E8 gene products in serum, blood, urine and tissue and to thereby detect the presence of
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                                                                                                                                                                                Human MHC class I molecule HLA-B7 binding 103P3E8 peptide #69.
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Indels
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Pred. No. 73;
0; Mismatches
 0; Mismatches
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                                                                                                           AAU71662 standard; peptide; 10 AA.
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ilarity 100.0%; Pr
Conservative 0;
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                                                                                                                                                        (first entry)
 5; Conservative
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Best Local Similarity
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                         PRGAP
                                                PRGAP
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                                                                                                                                                                                                                                                                     Homo sapiens.
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                                                                                                                                                         26-FEB-2002
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                                                                                                                                                                                                                                                                                                                    25-OCT-2001
                                                                                                                                  AAU71662;
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 Matches
                                                                                   RESULT 14
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Immuno:contraceptive peptide(s) derived from Zona Pellucida protein ZP3 - used to prepare contraceptive vaccine and in assays to measure autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peptides AAR93205-9 are examples of peptides derived from the sequence of the Zona Pellucida protein ZP3 which contain the amino acid sequences AAR93210 or AAR93210 or AAR93210 or AAR93210 based on amino acids 23-30 of the ZP3 protein. The novel peptides can be used in vaccines to induce a humoral response against the ZP3 protein e.g. for contraception, esp. as they do not raise a pathogenic T cell response since they do not contain T cell epitopes. The novel peptides thus avoid potential ovarian damage caused by some peptides used as vaccines. The peptides are also useful in assays for detecting autoimmune antibodies or for generating
                                                                                                               Zona pellucida; ZP3; vaccine; humoral response; contraception; epitope; pathogenic T cell response; ovary; assay; autoimmune; antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytostatic; cancer; gene therapy; DGI-2; DGI-5; DGI-7; DGI-9; Hras; leptin; VBGF; vascular endothelial growth factor receptor; VBGF-R1; VBGF-R2; VBGF-R3; FTI1; FMS-related tyrosine kinase 1; FLK1; KDR; Kinase insert domain protein receptor; BGFR; epidermal growth factor; FGFR1; fibroblast growth factor; T1e-1.
                                                          New contraceptive peptide #5 derived from Zona Pellucida ZP3 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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No. 1e+02;
0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bunschoten EJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25.0%; Score 5; DB 2
100.0%; Pred. No. 1e+
iive 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 5; Page 31; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Van Duin M, Grootenhuis AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                95WO-EP003311.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94EP-00202392
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(first entry)
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                                                                                                                                                                            passive immunisation
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Best Local Similarity
Matches 5; Conserv
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reading frame of a pathogenic virus, where the polypeptide starts with a methionine amino acid residue, which comprises an antigenic determinant and more than 7 amino acid residues. The invention may be useful for the production of compounds with a virucide activity or the development of a vaccine. The polypeptide or its fragments may be useful as a therapeutic agent. It is also useful for the manufacture of a medicament for treating or preventing an infection with the pathogenic virus. The present sequence is that of a hepatitis C virus peptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cell, comprising contacting the cell with at least one antibody, or its antigen-binding portion, where the antibody or antigen-binding portion binds to an epitope located within residues 200-400 of EphB4, which consists of the sequence of 984 amino acids (S1) fully defined in the specification, or to an epitope located in a sequence at least 85% identical to residues 200-400, 201-245, 220-244 or 220-230 of EphB4. The composition and methods are useful for treating or preventing cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        therapy, Inhibititor, cancerous growth, cancer, breast, type-B receptor 4 precursor, EphB4; human.
                                                          New polypeptide encoded by an alternative reading frame of a pathogenic virus comprising an antigenic determinant, useful for treating or preventing an infection with the pathogenic virus.
                                                                                                                                                                                            This invention relates to a novel polypeptide encoded by an alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g cancerous growth of a cell by contacting the cell with an or its antigen-binding portion, that binds to an epitope of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a method of inhibiting cancerous growth of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 8; Length 20; . 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             25.0%; Score 5; DB 8
100.0%; Pred. No. 1.3
tive 0; Mismatches
                                                                                                                                                  Claim 7; SEQ ID NO 183; 220pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADM32132 standard; protein; 25 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-SEP-2002; 2002AU-00951409.
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Best Local Similarity 1000.
انام 5, Conservative
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                  WPI; 2004-169243/16
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prostate, ephrin
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2004024773-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADM32132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADM32132
Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel method of selecting target and target binder pairs comprising mixing in a reaction vessel phage expressing binder binders, each having dislogates and phage expressing target binders, each having distinguishable selection markers and selecting target and target binder pairs based on the selection markers. The molecules of the invention demonstrate cytostatic activity whilst the method may be useful for selecting target and target binder pairs for preparing a composition for treating cancer. Furthermore, the method may be utilised during gene therapy procedures. The current sequence is that of the cancer-related DGI-2-binder peptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                            composition for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pathogenic virus; alternative reading frame; antigenic determinant; virucide; vaccine; therapeutic agent; infection.
                                                                                                                                                                                                                                                                                                                                                                                        Selecting target and target binder pairs for preparing a compositreating cancer by mixing in a reaction vessel phage expressing biological targets and phage expressing target binders.
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                                                                                                                                                                                                                                                                                  Blume A;
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                                                                                                                                                                                                                                                                                  Dedova O,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 26; SEQ ID NO 66; 172pp; English
                                                                                                                                                                                                                                                                               Spruyt M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hepatitis C virus 1b peptide SeqID183
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                                                                                                                                                                                                                                   (DGIB-) DGI BIOTECHNOLOGIES INC
                                                                                                                                                                                         24-OCT-2001; 2001US-0345471P.
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11-JUL-2003; 2003EP-00450171
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Best Local Similarity
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             Unidentified.
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mutations in RNA rather than DNA. The invention describes the
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Carter KC;
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Kayw H,
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                                                                                                                                                                                                                                                                                                                                                    Human; beta-amyloid precursor protein; beta-APP; diagnosis; cancer; frameshift mutathon; age-related disease; neurodegenerative disorder; Alzheiner's disease; Down's syndrome; myotonic dystrophy; neuronal; Huntington's disease; multiple sclerosis; alcoholic liver disease; diabetes mellitus type II; microtubule associated protein; Tau; Big Tau; ubiquitin B; apolipoprotein E; MAP2; neurofilament-L; neurofilament-K; neurofilament-F; presenilin I; presenilin II; cellular tumour antigen; bcllarillary acidic protein; SPAP; ps3; semaphorin III; HUPF-I; bcl-2; B-cell leukemia/lymphoma 2 prote-oncogene; HMGP-C; NGP-A; high mobility group protein-C; neuroendocrine specific protein A.
(e.g. breast or prostate cancer) or for identifying agents that inhibit cancerous growth of a cell. The current sequence represents an EphB4 blocking peptide used in an example from the invention in EphB4 epitope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Diagnosing disease by detecting frameshift mutations in RNA or corresponding protein mutations - used to diagnose cancer and neurological diseases, particularly Alzheimer's disease, and also for treatment and prevention with specific ribozymes or wild-type RNA.
                                                                                                                          Gaps
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                                                                                               DB 8; Length 25; . 1.5e+02;
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                                                                                            25.0%; Score 5; DB 8
100.0%; Pred. No. 1.5
ive 0; Mismatches
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                                                                                                                                                                                                                                             AAY20230 standard; protein; 26 AA.
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                                                                                                                         5; Conservative
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Best Local Similarity
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                                                                      Sequence 25 AA;
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used of neuronal system RNA molecules, specifically proteins including used of neuronal system RNA molecules, specifically proteins including beta-amyloid precursor protein (beta-APP), the microtubule associated proteins Tau and Big Tau, ubiquitin B, apolipoprotein E, microtubule associated protein 2 (MAP2), neurofilament-L, neurofilament-M, neurofilament-F, presentiin I, presentiin II, glial fibrillary acidic protein (GRAP), the cellular tumour antigen p53, B-cell leukemia/lymphoma 2 (bcl-2) proto-oncogene, semaphorin III, HUPP-1, high mobility group protein-C (HMGP-C) and neuroendocrine specific protein A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human secreted protein, cancer; tumour; neurodegenerative disorder; developmental abnormality; fetal deficiency; blood disorder; leukemia; immune system disease; autoimmune disease; hepatic disease; renal disease; lymphoma; inflammation; allergy; ischemic shock; Alzheimer's; cognitive disorder; schizophrenia; prostate disease; bloostity; osteoporosis; arthritis; malignancy; testes disease; lung disease; thymus disease; digestive disorder; endocrine disorder; inflection; AlDS.
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Shi Y, Ebner R, Young P.
DR, Janat F, Endress GA;
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9705-0063089P
9705-0063090P
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97US-00633867P.
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Matches 5; Conservative
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Lafleur DW,
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                                                            The specification describes human secreted proteins. The polynucleotides and their corresponding secreted polypeptides are useful for preventing, treating or amelilorating medical conditions, e.g. by protein or gene therapy. Pathological conditions can also be diagnosed by determining the amount of the polypeptides in a sample or by determining the presence of mutations in the polynucleotides. Specific uses are described for each of the polynucleotides. Specific uses are described for each of the polynucleotides, specific uses for the diagnosis or expressed in, and include developing products for the diagnosis or treatment of cancer, tumours, neurodegenerative disorders, leukemias, abnormalities and fetal deficiencies, blood disorders, leukemias,
                                                                                                                                                                    diseases of the immune system, autoimmune diseases, hepatic and renal disease, lymphomas, inflammation, allergies, ischemic shock, Alzheimer's and cognitive disorders, schizophrenia, prostate diseases, obesity, disorders involving osteoclasts such as osteoporosis, arthritis or malignancies, diseases of testes, lung or thymus, digestive/endocrine disorders, infections and AIDS. The polypeptides are also useful for identifying their binding partners
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter;
                                                                                                                                                                                                                                                                                                        Gaps
                     New isolated human genes and the secreted polypeptides they encode.
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                                          Disclosure; Page 485; 546pp; English
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990S-0126785P

990S-0127462P

990S-0128714P

990S-0129845P

990S-013981P

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               termination sequence
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WPI; 1999-303069/25
                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                           12 CQMLE 16
                                                                                                                                                                                                                                                                                                                                               3 COMILE 7
                                                                                                                                                                                                                                                            Sequence 28 AA;
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25-MAR-1999;
29-MAR-1999;
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16-APR-1999;
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21-APR-1999;
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30-APR-1999;
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23-APR-1999;
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990S-0158369P.
990S-0159293P.
990S-0159294P.
990S-0159295P.
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9908-0153070P.
9908-0153070P.
9908-0154038P.
9908-0154739P.
9908-015486P.
9908-0155659P.
9908-0156659P.
9908-0156659P.
9908-0157117P.
9908-0157117P.
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990S-0149930P.
990S-0150566P.
990S-015066P.
                   990S-0145089P
990S-0145192P.
990S-0145145P.
990S-0145218P.
99US-0145224P.
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99US-0148684P.
99US-0149368P.
99US-0149175P.
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99US-0149722P.
99US-0149723P.
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99US-0151303P.
99US-0151438P.
99US-0151930P.
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99US-0159584P.
99US-0160741P.
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99US-0147302P.
99US-0147192P.
99US-0147260P.
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99US-0147493P.
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99US-0148341P.
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      99US-0145085P.
                                                              99US-0145913P.
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                                                                                  99US-0145951P.
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99US-0145088P
                                                      99US-0145276P
                                                                                                      02-AUG-1999;
03-AUG-1999;
04-AUG-1999;
04-AUG-1999;
05-AUG-1999;
06-AUG-1999;
06-AUG-1999;
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13-OCT-1999;
14-OCT-1999;
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18-OCT-1999;
21-OCT-1999;
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09-AUG-1999;
10-AUG-1999;
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14-OCT-1999
                                                23-JUL-1999;
26-JUL-1999;
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25-AUG-19
26-AUG-19
27-AUG-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Non-infective cell-requiring method of searching for hepatitis D remedies in a system containing e.g. polypeptide binding to RNA polymerase II with measuring of binding level for indication.
                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Virucide; hepatitis D virus antigen; HDV antigen; RNA polymerase II.
                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatitis D virus type III antigen protein fragment, SEQ ID 9.
                                                                                                                                                                                                                                 Score 5; DB 3; Length 33; Pred. No. 1.9e+02; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 5; SEQ ID NO 9; 84pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       & ENG.
                                                                                                                                                                                                                                                                                                                                                                     ADF94734 standard; protein; 42 AA.
                                                                                                                                                                                                                         25.0%; SCUL-
100.0%; Pre
                                             990S-0160815P-
990S-0160980P-
990S-0160980P-
990S-0161408P-
990S-0161405P-
990S-0161359P-
990S-0161350P-
990S-0161350P-
990S-0161350P-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-FEB-2002; 2002WO-JP001817.
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99US-0160767P
                       99US-0160770P
                                                                                                                                                                                    99US-0161992P
                                                                                                                                                                                               99US-0161993P
99US-0162142P
            99US-0160768P
                                                                                                                                                                                                                                                                                                                                                                                                                      26-FEB-2004 (first entry)
                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Handa H, Yamaguchi Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-698673/75.
                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                  OMLET 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis D virus
                                                                                                                                                                                                                                                                                                          OMLET 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200268655-A1.
                                    21-OCT-1999;
21-OCT-1999;
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                                                                        22-0CT-1999;
22-0CT-1999;
           21-OCT-1999
21-OCT-1999
                                                             22-0CT-1999
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                                                                                                                                    26-0CT-1999
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29-OCT-1999
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RESULT 23

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The present sequence represents a protein from a targeting vector Tg-Not containing a PGK-neomycin-resistant gene, from the present invention. The targeting vector is used in an example of the present invention for producing vector is used in an example of the present invention for producing a gene-deleted animal e.g. a mouse comprising no gene to encode nucleobindin in which all or part of nucleobindin gene is deleted or replaced by another gene. The mouse can be used for screening therapeutic agents against diseases such as blood vessel inflammation and
                                                                        Targeting vector Tg-2/Not containing PGK-neomycin-resistant gene protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gene-deleted animal e.g. mouse - useful for screening therapeutic agents for diseases such as blood vessel inflammation and nephritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Thrombospondin 4; TSP4; KDEL receptor inhibitor; heat shock protein; immune response; oligomerisation domain; neoplasia; sarcoma; lymphoma; leukaemia; melanoma; carcinoma; glioblastoma; astromytoma; oncogene; infectious disease; allergy; autoimmune disease.
                                                                                                           Targeting vector, Tg-2/Not; nucleobindin; screening; nephritis; blood vessel; inflammation; PGK-neomycin-resistant gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2; Length 44; . 2.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xenopus thrombospondin 4 trimerisation domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25.0%; Score 5; DB 2
100.0%; Pred. No. 2.5
iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY44951 standard; peptide; 46 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Fig 3; 11pp; Japanese
                                                                                                                                                                                                                                                                                                                                                      MITS-) MITSUI SEIYAKU KOGYO KK.
                                                                                                                                                                                                                                                                                                                   96JP-00298219.
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                                                                                                                                                                                                                                                                              96JP-00298219
                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                           FUJI-) FUJITA GAKUEN.
                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1998-325762/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
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                                                                                                                                                                                                    JP10117633-A.
                                   04-AUG-1998
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                                                                                                                                                                                                                                                                                                                   21-OCT-1996;
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                                                                                                                                                                 Synthetic.
AAW57222;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a method for searching hepatitis D remedies. The method comprises adding a test compound to a system containing e.g. a hepatitis D virus antigen (HPV antigen) and RNA polymerase II, measuring the binding level of HDV antigen binding to pinding the binding level of ENV antigen binding to FNA polymerase II, and comparing with a control for selection of a compound inhibiting the binding. The method is for screening remedies for hepatitis D including for hepatitis virus D accompanying hepatitis B, such as gene expression promoters applicable in regeneration medicine for treating organs or tissues. The present sequence is a HDV antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Non-infective cell-requiring method of searching for hepatitis D remedies in a system containing e.g. polypeptide binding to RNA polymerase II with measuring of binding level for indication.
                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                         Virucide; hepatitis D virus antigen; HDV antigen; RNA polymerase II.
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                                                                                                                                                                                                                                                                                                                                                                    Hepatitis D virus type II antigen protein fragment, SEQ ID 7.
                                     DB 5; Lens
40. 2.4e+02;
0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25.0%; Score 5; DB 5; Length 42; 100.0%; Pred. No. 2.4e+02; ive 0; Mismatches 0; Indels
                                     25.0%; bccc.
100.0%; Pred. No. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 5; SEQ ID NO 7; 84pp; Japanese.
                                                                                                                                                                                                                                                     ADF94732 standard; protein; 42 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW57222 standard; protein; 44 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CIRC-) CIRCLE PROMOTION SCI (KYOW ) KYOWA HAKKO KOGYO KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-FEB-2001; 2001JP-00053163.
                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                     5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yamaguchi
                                              Query Match
Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
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               Sequence 42 AA;
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                                                                                                                                                                                                                                                                                            ADF94732;
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Best Loc Matches

ð d RESULT 24 AAW57222

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Gaps

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Rank DR;
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 Chen W,
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30-UUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00633366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001; 2001WO-US000670
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                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                  5; Conservative
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Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-488901/53.
                         WPI; 2001-488901/53
                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                       OMLET 17
                                                                                                                                                                                                                                                                                                                             36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cervical cancer.
                                                                                                                                                                                                                                     Sequence 46 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200157278-A2.
                                                                                                                                                                                                                                                                                                                              OMLET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Probe; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                   12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                             AAM15409;
                                                                                                                                                                                                                                                                                                        13
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  SG,
                                                                                  Claim
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                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                       The patent discloses the use of KDEL receptor inhibitor to promote secretion of proteins that are normally retained within the cell such as heat shock proteins by inhibiting KDEL receptor—mediated return of protein complexes to endoplasmic reticulum. This makes the secreted heat shock proteins more accessible to the immune system and improves immune response to a target antigen. The inhibitor protein comprises several subunits where each subunit comprises an oligomerisation domain and has at its carboxy terminus a region which binds to a KDEL receptor. The target antigen may be associated with diseases including neoplasia such as sarcoma, lawpenma, leukemia, melanoma, carcinoma, glioblastoma and astromytoma, with defective tumour suppressor genes, oncogenes, infectious diseases, allergy or autoimmune diseases. The present sequence is Kenopus thrombospondin 4 (TSP4) trimerisation domain. Oligomers formed via oligomerisation domain of TSP4 are used to produce high avidity binding protein which bind to KDEL receptor
                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                         Inhibitors of the KDEL receptor which comprises an oligomerization domain useful for promoting secretion of proteins which are normally retained
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide #7576 encoded by probe for measuring cervical gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Probe; human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                                                                                                                                                                                                                                                                                              .,
                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                      DB 3; Length 46; .. 2.5e+02; ches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                       25.0%; Score 5; DB 3
100.0%; Pred. No. 2.5
iive 0; Mismatches
                                     (SLOK ) SLOAN KETTERING INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAM21142 standard; protein; 46 AA.
                                                                                                                                                      Claim 12; Page 30; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0207456P.
2000US-00608408.
2000US-00623466.
2000US-0234687P.
2000US-0234687P.
2000US-0236559P.
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              98US-00124671.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.
Matches 5; Conservative
                                                            Mayhew M,
                                                                                   WPI; 2000-195296/17
                                                                                                                                                                                                                                                                                                                                                                                                                                     16 ETMFL 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                         31 ETMFL 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cervical cancer.
                                                                                                                                cell.
                                                                                                                                                                                                                                                                                                                                                                 Sequence 46 AA;
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30-JUN-2000;
03-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-FEB-2000;
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              29-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-AUG-2001
                                                                                                                     useful for
within the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAM21142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 26
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The present invention relates to human single exon nucleic acid probes (SENP: see AAI10068-AAI28459). The present sequence is a peptide encoded by one such probe. The SENPs are derived from human Heida cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human genome-derived single exon nucleic acid probes useful for analyzing
genome-derived single exon nucleic acid probes useful for analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to human single exon nucleic acid probes (SENP: see AAI10068-AAI28459). The present sequence is a peptide encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide #1843 encoded by probe for measuring cervical gene expression.
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                                              gene expression in human cervical epithelial cells
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100.0%; Pred. No. 2.5
tive 0; Mismatches
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                                                                                                                                 27; SEQ ID NO 25968; 487pp; English
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RESULT 29

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           cells. The SENPS
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by one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver.
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                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                    DB 4; Length 46;
. 2.5e+02;
                                                                                                                                                                                                25.0%; Score 5; DB 4
100.0%; Pred. No. 2.5
ive 0; Mismatches
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21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
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26-MAY-2000, 2000US-0207456P.
30-JUN-2000, 2000US-00608408.
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Best Local Similarity 100.
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-483447/52
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                                                                                                                                                                Sequence 46 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                               1 genome-derived single exon nucleic acid probes useful for analyzing expression in human fetal liver.
                                                                                                             Human; foetal liver; gene expression; single exon nucleic acid probe.
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                                                                                  Peptide #1920 encoded by human foetal liver single exon probe.
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Pred. No. 2.5e+02;
0; Mismatches 0; Indels
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ABB34414 standard; peptide; 46 AA.
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100.0%; Pre
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30-UTN-2000; 2000US-0069408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0235959.
04-OCT-2000; 2000GB-00024263.
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                                                        (first entry)
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Best Local Similarity
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                                                      04-FEB-2002
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                            ABB34414;
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25.0%; Score 5; DB 4; Length 46; 100.0%; Pred. No. 2.5e+02; Live 0; Mismatches 0; Indels

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Chen W, Rank DR
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26-MAY-2000; 2000US-0270456P.
30-UUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-023468TP.
27-SEP-2000; 2000US-023468TP.
04-OCT-2000; 2000US-023468TP.
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                                                              (MOLE-) MOLECULAR DYNAMICS INC
       03-AUG-2000; 2000US-00632366.
21.5EP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-023539P.
4-0CT-2000; 2000GB-00024263.
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2000US-00608408
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                                                                                                                                                                                                                                                                                                      5; Conservative
                                                                                                                                                                                                                                        human genetic disorders
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                                                                                   Hanzel DK,
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                                                                                                      WPI; 2001-488897/53.
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Best Local Similarity
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                                                                                                                                                                                                                                                           Sequence 46 AA;
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 30-JUN-2000;
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                                                                                    Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer
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                                                                                                                                                                                                                                                                                           Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human placenta.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide #11384 encoded by probe for measuring placental gene expression.
Peptide #1934 encoded by probe for measuring placental gene expression.
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                       Probe; microarray; human; placenta; antenatal diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Probe; microarray; human; placenta; antenatal diagnosis;
                                                                                                                                                                                                                                                                                                                             Claim 27; SEQ ID NO 28166; 654pp; English.
                                                                                                                                                                                                                                                    Rank DR;
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26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0234687P.
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26-MAY-2000; 2000US-0207456P.
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                                                                                                                                                                                                                                                                                                                                                                                                      human genetic disorders
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Best Local Similarity
Matches 5; Conserv
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                                   genetic disorder
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAM37347;
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Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human placenta.
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                                                                                                                                                                                                            The present invention relates to single exon nucleic acid probes (SENP: see AA131315-AA157546). The present sequence is a peptide encoded by one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; microarray; single exon probe; gene expression; breast; disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peptide #1902 encoded by breast cell single exon nucleic acid probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25.0%; Score 5; DB 4; Length 46; 100.0%; Pred. No. 2.5e+02; ive 0; Mismatches 0; Indels
                                                                                                                                      Claim 27; SEQ ID NO 37616; 654pp; English.
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The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human breast and BT 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids derived from mRNA of human breast, and then measuring the label bound to each probe of the microarray. The probes are useful for verifying the expression of regions of genomic DNA predicted to encode proteins. They are useful for gene disease. Gene expression analysis is useful for prognosing breast disease. Gene expression analysis is useful for assessing the toxicity of chemical agents on cells. The microarray of this invention presents a far greater diversity of probes for measuring gene expression, with far less bias than expressed sequence tag microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present sequence is a peptide encoded by a single exon nucleic acid probe of the invention. Note: The specification, but was obtained in electronic format directly from WIPPO is the control of the present of the printed the control of control of control of the control of control of control of the control of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein #1825 encoded by probe for measuring heart cell gene expression.
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                     Claim 27; SEQ ID NO 12219; 327pp + Sequence Listing; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25.0%; Score 5; DB 4; Length 46; 100.0%; Pred. No. 2.5e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           specification, but was obtained in electron:
at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DR;
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2000US-0234687P.
2000US-0236359P.
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2000US-00608408.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           congenital heart disease.
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Best Local Similarity
Matches 5; Conserv
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21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
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Gaps

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                                                          probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenical heart disease. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
          The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart (see ABA21535-ABA41305). The present sequence is a protein encoded by one such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is a protein encoded by one of the probes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      genome-derived single exon nucleic acid probes useful for analyzing
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; bone marrow expressed exon; gene expression analysis; probe; microarray; cancer; leukaemia; lymphoma; myeloma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human bone marrow expressed probe encoded protein SEQ ID NO:
                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                  DB 4; Length 46;
                                                                                                                                                                                                                                                                                   2.5e+02;
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100.0%; Pred. No. 2.5
tive 0; Mismatches
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; 200US-0207456P.
; 200US-00608408.
; 200US-023346.
; 2000US-0234687P.
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                                                                                                                                                                                                                                                                                                  5; Conservative
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Matches 5; Conserv
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                                                                                                                                                                                                                                 Sequence 46 AA;
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21-SEP-2000;
27-SEP-2000;
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30-JUN-2000;
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                                                                                                                                                                                                                                                                  Query Match
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X2555555555555588
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Sequence 46 AA;

Single exon nucleic acid probes for analyzing gene expression in human

Claim 15; SEQ ID NO 21596; 530pp; English.

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genome-derived single exon nucleic acid probes useful for analyzing
                                                                                  Human; liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; coronary heart disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 27; SEQ ID NO 37483; 658pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                           Chen W, Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene expression in human adult liver.
                                                          Human liver peptide, SEQ ID No 37483.
                                                                                                                                                                                                                                                                                                                                                                               (MOLE-) MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                                                                                                   30-UUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
                                                                                                                                                                                                                             30-JAN-2001; 2001WO-US000664.
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2000US-0207456P.
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                              (first entry)
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Best Local Similarity
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30-JUN-2000; 2
03-AUG-2000; 2
                                                                                                                                        Homo sapiens.
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                               25-FEB-2003
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 ABG58835
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is a protein encoded by one of the probes of the invention
                                                                                                                                                                                                                                                                                                      Human; brain expressed exon; gene expression analysis; probe; microarray; Alzheimer's disease; multiple sclerosis; schizophrenia; epilepsy; cancer.
                                                                                                                                                                                                                                                                        Human brain expressed single exon probe encoded protein SEQ ID NO: 36494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Single exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention provides a number of single exon nucleic acid
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                 Length 46;
                                               0; Indels
                 Score 5; DB 4; Le.
Pred. No. 2.5e+02;
         25.0%; bccd. No. 2.100.0%; Pred. No. 2.
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                                                                                                                                                                                    AAM64389 standard; protein; 46 AA.
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26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-02334687P.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0234687P.
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                                                                                                                                                                                                                                                (first entry)
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Best Local Similarity 100.
Matches 5; Conservative
                                                  5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-483446/52
                                  Similarity
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                                                                                                          RGAPM 24
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                                                                               2 RGAPM
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                    Query Match
Best Local
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                                                  Matches
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The invention relates to a single exon nucleic acid probe (SENP) (I) for measuring human gene expression in a sample derived from human adult liver. comprising one of 13109 defined nucleotide sequences given in the specification (or complements/ fragments). The probe hybridises at high stringency to a nucleic acid molecule expressed in the human adult liver. (I) may be used for predicting, measuring and displaying gene expression in samples derived from human adult liver. The genes identified may be involved in genetic liver diseases such as cirthosis, the proporteinaemia, hyperlipidaemia and hypercholesterolaemia which is associated with coronary heart disease. ABG47348-ABG59930 represent human liver single exon encoded peptides of the invention. Note: The sequence information for this patent does not appear in the printed specification but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 4; Length 46; . 2.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25.0%; Score 5; DB 4
100.0%; Pred. No. 2.5
ive 0; Mismatches
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ZXEXEX
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ABG58835 standard; peptide; 46 AA.

ABG58835 ID ABG5 RESULT 36

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The present invention relates to novel single exon nucleic acid probes such probe. The probes are useful for measuring human gene expression in a human breast sample, where the probe are useful for measuring human gene expression in nucleic acid expressed in the human breast. The probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human breast, particularly those diseases with polygenic actiology. The diseases include: breast cancer, disorders of development, breast diseases and non-carcinoma tumours. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from MIPO at
                                                                                                                                                                                                                                                                                                                                                            Novel single exon nucleic acid probe used to measuring gene expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human peptide encoded by genome-derived single exon probe SEQ ID 35887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; single exon probe; asthma; lung cancer; COPD; ILD; chronic obstructive pulmonary disease; interstitial lung disease; familial idiopathic pulmonary fibrosis, neurchibromatosis; tuberous sclerosis; Gaucher's disease; Niemann-Pick disease; Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis; pulmonary histiocytosis; lymphangioleionymonosis; Karagener syndrome; pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia; pulmonary dysplasia; pulmonary dysplasia; pulmonary hypertension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4; Length 46; 2.5e+02; ches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25.0%; Score 5; DB 4
100.0%; Pred. No. 2.5
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 27; SEQ ID NO 11910; 322pp; English.
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                                                                                                                                                                                                                                                                                Rank DR;
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                                                                                  26-MXY-2000; 2000US-0207456P.
30-UUN-2000; 2000US-0069408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0234559P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                    (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                Chen W,
                          29-JAN-2001; 2001WO-US000661
                                                                     2000US-0180312P
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                                                                                                                                                                                                                                                                                Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                       WPI; 2001-476286/51
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es 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                      human breast.
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                                                                   04-FEB-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human genome-derived single exon nucleic acid probes useful for analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Probe, human, breast disease, breast cancer, development disorder, inflammatory disease, proliferative breast disease, non-carcinoma tumour.
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hypercholesterolaemia; coronary heart disease.
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100.0%; Pred. No. 2.5
tive 0; Mismatches
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ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                       Rank DR;
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2000US-00608408.
2000US-00632366.
2000US-0234687P.
2000US-0236359P.
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Best Local Similarity 100.0.
Best as 5; Conservative
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                                                                                WO200157273-A2
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                                         Homo sapiens
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26-MAY-2000;
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RESULT 38 AAM03170

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The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from the nucleic acid probes for measuring gene expression in a sample derived from the 1214 nucleic acid sequences mentioned in the specification, or their complements or the 123H open reading frames derived from the 121H probes. Also included are a marcoarray comprising the novel set of probes comprising (a) contacting the array with a cid expressed in the human lung, measuring gene expression in a sample derived from human lung measuring gene expression in a sample derived from human lung measuring gene expression in a sample derived from human lung measuring the label detectably bound to each probe of the array identifying exons in a cukryotic geneme, comprising (a) carray; identifying exons in a cukryotic geneme, comprising (a) array; identifying exons in a cukryotic geneme, comprising (a) and probe is included a rangment identical to the predicted montace and probe is included anying a fragment identical to the predicted exon, the probe is included bove and (b) measuring the expression of each of the exons in several comprising (a) identifying exons from genomic sequence by the method above and (b) measuring the expression of each of the exons in the tissues and/or cell types using phyridisation to a single exon microarrays having a probe with the exon, where a common pattern of the exons should be assigned to a single gene; a peptide comprising or probes/open reading frames (GRP). The probes are used for gene expression analysis, and for identifying exons in the specification, or encoded by the correct chronic obstructive pulmonary disease (LDD), familial idiopathic pulmonary disease such as asthmatic comparations, and the stands of frames (GRP). The probes are used for gene expression of instrocycles; pulmonary harmanist, pulmonary harmanist, pulmonary probes and probes are requence state sequence as apptide/procein encoded by a single exon probes. The probes of the i
                                                                                                                                                                                                                                                                                                                                               Spatially-addressable set of single exon nucleic acid probes, used to
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                                                                                                                                                                                                                                                                                                                                                                        measure gene expression in human lung samples.
                                                                                                                                                                                                                                                                                                                                                                                                               Claim 27; SEQ ID NO 35887; 634pp; English.
                                                                                                                                                                                                                                                             Rank DR;
                                                                                                                                                                                                                    (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                             Chen W,
                                                                                                                           21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
                                                                               2000US-00608408.
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30-JAN-2001; 2001WO-US000665
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30-JUN-2000; 2
03-AUG-2000; 2
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Gaps . 0 Indels 25.0%; Score 5; DB 5; Length 46; 100.0%; Pred. No. 2.5e+02; ive 0; Mismatches 0; Indels 5; Conservative Query Match Best Local Similarity Matches 5; Conserv

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RESULT 40 ABG37192

Human peptide encoded by genome-derived single exon probe SEQ ID 26857. Human; single exon probe; asthma; lung cancer; COPD; ILD; chronic obstructive pulmonary disease; interstitial lung disease; familial idiopathic pulmonary fibrosis; neurofibromatosis; tuberous sclerosis; Gaucher's disease; Niemann-Pick disease; Hermansky-Pudlak syndrome; sarcoidosis; pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome; pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia; pulmonary ciliary dyshinesis; pulmonary hypertension; hyaline membrane discare Chen W, Rank DR; ABG37192 standard; peptide; 46 AA. (MOLE-) MOLECULAR DYNAMICS INC 20.-UTA - 2000; 2000US - 00608408. 03.-AUG-2000; 2000US - 00632566. 21.-SEP-2000; 2000US - 0234567P. 27.-SEP-2000; 2000US - 0235359F. 04.-CCT-2000; 2000GB - 00024263. 30-JAN-2001; 2001WO-US000665 (first entry) hyaline membrane disease. Penn SG, Hanzel DK, WPI; 2002-114183/15. MO200186003-A2. Homo sapiens. 19-AUG-2002 26-MAY-2000; 04-FEB-2000; 15-NOV-2001. ABG37192; 

Spatially-addressable set of single exon nucleic acid probes, used to measure gene expression in human lung samples.

Claim 27; SEQ ID NO 26857; 634pp; English.

The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from the unan lung comprising single exon nucleic acid probes having one of from human lung comprising single exon nucleic acid sequences mentioned in the specification, or their complements or the 1237 open reading frames derived from the 12614 nucleic acid expressed are a microarray comprising the novel set of probes which hybridise at high stringency to a nucleic cacid expressed in the human lung, measuring gene expression in a sample derived from human lung, comprising (a) contacting the array with a collection of detectably labeled nucleic acids derived from human lung mRNA, and (b) measuring the label detectably bound to each probe of the array; identifying exons in a eukaryotic genome, comprising (a) array; identifying exons in a eukaryotic genome, comprising (a) calgorithmically predicting selection of detectably contacting specific hybridisation of detectably labeled nucleic acids from eukaryote lung mRNA, to a single exon probe, comprising (a) identifying exons from genomic sequences of in the above mentioned microarray; assigning exons to a single gene, comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising of identifying exons in the tissues and/or cell types using hybridisation to a single exon microarrays having a probe with the exon, where a common pattern of microarrays having a probe with the exon, where a common pattern of capove and (b) measuring hybridisation to a single exon comprising of the exons in the tissues and/or cell types indicates that the exons should be assigned to a single gene; a peptide comprising of 12011 sequences, mentioned in the specification, or encoded by the probes are used for gene expression of the exons in a gene a peptide comprising or probes/open reading frames (ORF). The probes are used for gene expension of the exons in a gene exon t

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human genome-derived single exon nucleic acid probes useful for analyzing
disease (ILD), familial idiopathic pulmonary fibrosis, neurofibromatosis, tuberous sclerosis, Garocher's disease, Wiemann-Pick disease, Hermansky-budlak syndrome, sarcoidosis, pulmonary haemosiderosis, pulmonary pulmonary proteinosis, pulmonary histiocytosis, lymphangioleiomyomtosis, pulmonary alveolar proteinosis, Karagener syndrome, fibrocystic pulmonary dysplasia, primary ciliary dyskinesis, pulmonary hypertension and hyaline membrane disease. The present sequence is a peptide/protein encoded by a single exon probe of the invention. Note: The sequence data for this patent did not form part dithe printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
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Best Local Similarity
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21-SEP-2000;
27-SEP-2000;
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DB 4; Length 47;

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Query Match

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                                                                                                                                                                                                 Peptide #5617 encoded by probe for measuring placental gene expression.
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        Pred. No. 2.6e+02;
Mismatches 0;
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2000US-0234687P.
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2000US-00608408.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   from human placenta. The
human genetic disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human genome-derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-488897/53.
        Best Local Similarity
Matches 5; Conserv
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                                                                 13 PRGAP 17
                                           1 PRGAP 5
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                                                                                                                                                                                                                                    genetic disorder
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 47 AA;
                                                                                                                                                                                                                                                                                   WO200157272-A2
                                                                                                                                                                                                                                                                                                                                                                  26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                         17-OCT-2001
                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                     21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                        04-FEB-2000;
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                                                                                                                                                  AAM31580;
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                                                                                                                                                                                                                         Probe;
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Matches
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ABB23358
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Chen W, Rank DR

Hanzel DK,

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genome-derived single exon nucleic acid probes useful for analyzing
                                                                                                                                                                                                                                                                                Example 4; SEQ ID NO 31607; 658pp + Sequence Listing; English.
                                                                                                                                                                                                                                                          gene expression in human bone marrow.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MOLE-) MOLECULAR DYNAMICS INC.
                                                                              26-MAY-2000; 2000US-0207455E: 26-MAY-2000; 2000US-0207456E: 30-UUN-2000; 2000US-00632466: 21-SEP-2000; 2000US-0234687P: 27-SEP-2000; 2000US-0234589P: 04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                      (MOLE-) MOLECULAR DYNAMICS INC
                                              30-JAN-2001; 2001WO-US000668
                                                                                                                                                                                                                       WPI; 2001-488900/53.
WO200157276-A2.
                       09-AUG-2001
                                                                                                                                                                                               Penn SG,
                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart (see ABA21535-ABA41305). The present sequence is a protein encoded by one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
           Protein #5357 encoded by probe for measuring heart cell gene expression
                                                                                                                                                                                                                                                                                                                                                              Single exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; bone marrow expressed exon; gene expression analysis; probe; microarray; cancer; leukaemia; lymphoma; myeloma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human bone marrow expressed probe encoded protein SEQ ID NO: 31607.
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                                 Human, gene expression; heart; microarray; vascular system; cardiovascular disease; hypertension; cardiac arrhythmia; congenital heart disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25.0%; Score 5; DB 4; Length 47; 100.0%; Pred. No. 2.6e+02; rive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                Claim 15; SEQ ID NO 25128; 530pp; English.
                                                                                                                                                                                                                                                                                                              DR;
                                                                                                                                                                                                                                                                                                              Rank
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                                                                                                                                                                                               26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-0068408.
03-AUG-2000; 2000US-00632466.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-023659P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                       (MOLE-) MOLECULAR DYNAMICS INC
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                                                                                                                                                              30-JAN-2001; 2001WO-US000666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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Best Local Similarity 100.
Matches 5; Conservative
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                                                                                                             WO200157274-A2.
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                        probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is a protein encoded by one of the probes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, brain expressed exon, gene expression analysis, probe, microarray, Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy, cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human brain expressed single exon probe encoded protein SEQ ID NO: 30893.
                                                                                                                                                                                                                                                                                                                              Gaps
The present invention provides a number of single exon nucleic acid
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                                                                                                                                                                                                                                                              25.0%; Score 5; DB 4; Length 47; 100.0%; Pred. No. 2.6e+02; ive 0; Mismatches 0; Indels
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26-MX-2000; 2000US-0207456P.
30-UUX-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-023468TP.
27-SEP-2000; 2000US-023468TP.
04-OCT-2000; 2000GB-00024263.
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                                                                                                                                                                                                                                                                                                                              5; Conservative
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Best Local Similarity
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                                                                                                                                                                                                                Sequence 47 AA;
                                                                                                                                                                                                                                                                                                                                                                                         1 PRGAP
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                                                                                                                               probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is a protein encoded by one of the probes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               genome-derived single exon nucleic acid probes useful for analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a single exon nucleic acid probe (SENP) (I) for measuring human gene expression in a sample derived from human adult liver, comprising one of 13109 defined nucleotide sequences given in the specification (or complements/ fragments). The probe hybridises at high
                                                              Single exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia;
hypercholesterolaemia; coronary heart disease.
                                                                                                                                                                                                                                                                                               0;
                                                                                                     Example 4; SEQ ID NO 30893; 650pp + Sequence Listing; English.
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                                                                                                                                                                                                                                                                     DB 4; Length 47; 2.6e+02;
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100.0%; Pred. No. 2.6
ive 0; Mismatches
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             Rank DR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene expression in human adult liver.
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                                                                                                                                                                                                                                                                                                                                                                                                                  ABG53012 standard; peptide; 47 AA.
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2000US-0207456P.
2000US-00608408.
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2000US-0234687P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                            5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human liver peptide,
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                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                 13 PRGAP 17
                                                                                                                                                                                                                                                                                                                       1 PRGAP 5
                                                                                                                                                                                                                                         Sequence 47 AA;
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stringency to a nucleic acid molecule expressed in the human adult liver. (I) may be used for predicting, measuring and displaying gene expression in samples derived from human adult liver. The genes identified may be involved in genetic liver diseases such as cirrhosis, hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is associated with coronary heart disease. ABG47348-ABG59930 represent human liver single exon encoded peptides of the invention. Note: The sequence information for this patent does not appear in the printed specification but was obtained in electronic format directly from WIPO at from Lipub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human lung comprising single exon nucleic acid probes having one of 12614 nucleic acid sequences mentioned in the specification, or their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human peptide encoded by genome-derived single exon probe SEQ ID 30766
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                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Spatially-addressable set of single exon nucleic acid probes, used measure gene expression in human lung samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          exon probe; asthma; lung cancer; COPD; ILD;
active pulmonary disease; interstitial lung disease;
                                                                                                                                                                                                                                                                  ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chronic obstructive pulmonary disease; interstitial lung dise familial idiopathic pulmonary fibrosis; neurofibromatosis; tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
                                                                                                                                                                                                                            25.0%; Score 5; DB 4; Length 47; 100.0%; Pred. No. 2.6e+02; ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                      ABG41101 standard; peptide; 47 AA.
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2000US-00632366.
2000US-0234687P.
2000US-0236359P.
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                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     primary ciliary dyskinesi
hyaline membrane disease.
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                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                 13 PRGAP 17
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                                                                                                                                                                                             Sequence 47 AA;
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21-SEP-2000;
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                                                                                                                                                                                                                                                              Matches
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2001-639362/73.

N-PSDB; AAS83588

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comprements or the 1238, open reading Frames derived from the 12614
probes. Also included are a microatray comprising the novel set of probes
controlled are a microatray comprising the novel set of probes
it he novel set of probes which hybridise at high stringency to a nucleic
acid expressed in the human lung; measuring gene expression in a sample
collection of detectably labeled nucleic acids derived from human lung
collection of detectably labeled nucleic acids derived from human lung
collection of detectably labeled nucleic acids derived from probe of the
array, identifying exons in a eukaryotic genome, comprising (a)
algorithmically predicting at least one exon from genomic sequences of
the eukaryote; and (b) detecting specific hybridisation of detectably
labeled nucleic acids from eukaryote lung mRNA, to a single exon probe,
comprising (a) identifying exons from genomic sequence by the method
in the above mentioned microarray; assigning exons to a single gene,
comprising (a) identifying exons from genomic sequence by the method
above and (b) measuring the expression of each of the exons in several
comprising (a) identifying exons from genomic sequence by the method
above and (b) measuring the expression of each of the exons in the tissues and/or cell types using hybridisation to a single exon
comprising (a) identifying exons in the specification, or encoded by the
expression of the exons in the tissues and/or cell types indicates that
the exons should be assigned to a single gene; a peptide comprising one
of 12011 sequences, mentioned in the specification, or encoded by the
corposes/open reading frames (ORP). The probes are used for gene expression
analysis, and for identifying exons in a gene, particularly using human
conferived mRNA and for the study of lung diseases such as asthma, lung
analysis, and for identifying exons in a gene, particularly using human
conferived mRNA and for the study of lung diseases such as asthma, lung
disease (ILD), familial idiopathic pulmonary fibrosis, pulmonary haemosis, 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            present sequence is a peptide/protein encoded by a single exon probe of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
the 12387 open reading frames derived from the 12614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, chromosome mapping, gene mapping, gene therapy, forensic, food supplement, medical imaging; diagnostic, genetic disorder.
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23-AUG-2000; 2000US-00649167.
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Best Local Similarity
5; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HYSE-) HYSEQ INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 47 AA;
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    complements or
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sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polymuclectides are also used in diagnostics as expressed sequence tags for identifying expressed consistent in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful in antibodies against it, detecting or quantitating a useful for generating antibodies against it, detecting or quantitating a complement. (II) and its binding partners are useful in medical imaging of supplement. (II) and its binding partners are useful in medical imaging of supplement. (II) and its binding partners are useful in medical imaging of supplement. (II) and its binding partners are useful in medical imaging of supplement. (II) and its binding partners are useful in medical imaging involving aberrant protein expression or biological activity. The polypeptide and polymuclectide sequences have applications in diagnostics, forensiss, gene mapping, identification of mutations corresponsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences of the invention. Note: The sequence data for this patent did not appear in the printed specification, but was obtained in the printed pector of the printed specification, but was obtained in the printed produces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                            The invention relates to isolated polynucleotide (I) and polypeptide (II)
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                                                                     New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
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100.0%; Pred. No. 2.7
cive 0; Mismatches
                                                                                                                                                                       Claim 20; SEQ ID NO 49760; 103pp; English.
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100.0%; FAU
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99US-0123548P.
99US-0125788P.
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99US-0126785P.
99US-0127462P.
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25-MAR-1999;
29-MAR-1999;
01-APR-1999;
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09-MAR-1999;
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07-MAY-1999;
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0;
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                                                                                                                                                                                                                       25.0%; Score 5; DB 3; Length 54; 100.0%; Pred. No. 2.9e+02; ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                            AAG61712 standard; protein; 54 AA
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99US-0123180P.
99US-0125788P.
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990S-0161920P.
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5; Conserva
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23-MAR-1999;
25-MAR-1999;
29-MAR-1999;
01-APR-1999;
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16-APR-1999;
116-APR-1999;
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13-OCT-1999;

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Matches 5;
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99US-0159637P.
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                                                                                                                        28-JUL-1999)

02-AUG-1999

02-AUG-1999

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31-AUG-1999;
01-SEP-1999;
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13-OCT-1999;
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22-SEP-1999
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08-0CT-1999
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14-OCT-1999
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                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                   Mouse osteoblast differentiation promoting factor (OBDPF) fragment
                                                                                                                                                                                                                                                                                                                                                                                                      Mouse; osteoblast differentiation promoting factor; OBDPF; osteoblast differentiation; cell morphology; esterase expression; bone remodeling; osteoporosis; osteomalacia; hypercalcaemia.
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                                                                                                                                                                                                             DB 3; Length 54;
. 2.9e+02;
ches 0; Indels
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                                                                                                                                                                                                              Score 5; DB 3; Pred. No. 2.9e 0; Mismatches
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                                                                                                                                                                                                      25.0%; SCUL.
100.0%; Pre
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990S-0159584P

990S-016074P

990S-016076P

990S-016070P

990S-016081AP

990S-016081BP

990S-0160981P

990S-0160981P

990S-0160981P

990S-016144P

990S-016144P

990S-0161406P

990S-0161406P

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                                                                                                                                                                                                                                  Conservative
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KAWAI E.
OMORI K.
YANAKA N.
SAKURAI N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-521747/49.
                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                     OMLET 17
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18-OCT-1999;
21-OCT-1999;
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22-OCT-1999;
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(AKAT/)
(KAWA/)
(OMOR/)
(YANA/)
(SAKU/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   process.
                                                                                                                                                                                                                                                                                                    RESULT 51
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990S-0144335P
990S-014432P
990S-0144814P
990S-0144814P
990S-0145086P
990S-0145086P
990S-0145086P
990S-0145085P
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99US-0140354P.
99US-0140695P.
99US-0140823P.
99US-0140991P.
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9908-0139453P
9908-0139453P
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9908-0139455P
9908-0139457P
9908-0139460P
9908-0139461P
9908-0139461P
9908-0139461P
9908-0139462P
9908-0139462P
9908-0139463P
             99US-0134218P

99US-0134218P

99US-0134370P

99US-013470P

99US-013474P

99US-0135124P

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99US-0135124P

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99US-0142390P.
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99US-0144085P.
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19-JUL-1999;
19-JUL-1999;
20-JUL-1999;
20-JUL-1999;
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21-MAY-1999;
24-MAY-1999;
25-MAY-1999;
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                                                                                                                               28-MAY-1999;
                                                                                                                                           01-JUN-1999
    The invention describes an isolated murine or human polypeptide (I). The nucleic acid is useful for suppressing or strengthening the promotion of differentiation of osteoblast, induction of morphological change of a cell, or expression of an esterase activity. The antibody is useful for neutralising a function or an activity of the polypeptide. Detecting a function or an activity of the polypeptide. Detecting a function or an activity of the polypeptide. Detecting a concerning or identifying compounds, e.g. pharmaceutical compounds, which modulate the function or activity of the polypeptide. The identified compounds are valuable for selling. The polypeptides are also inseful in the activation process of the osteoblasts and induction of successive recruitment of the osteoclasts in bone remodeling process. The polypeptides and nucleic acids are useful in studies on pathological cut dispension of states, diagnostics, therapeutic and prophylactic treatment, and research costeomalacia or hypercalcaemia. This is the amino acid sequence of mouse costeoblast differentiation promoting factor (OBDPF) fragment used in comparison with known enzymes during the functional analysis of OBDPF
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                                                                                                                                                                                                                                                                                                                                                                                                                      Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter;
                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                  25.0%; Score 5; DB 6; Length 54; 100.0%; Pred. No. 2.9e+02; ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                       AAG60769 standard; protein; 55 AA
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99US-012548P.
99US-012624BP.
99US-012624BP.
99US-0126785P.
99US-0127462P.
99US-012844P.
99US-0130449P.
99US-0132448P.
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                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                          Query Match
Best Local Similarity 100...
                                                                                                                                                                                                                                                                                                                                                                                                                                               termination sequence
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                                                                                                                                                                                                                                                                                  4 RGAPM 8
                                                                                                                                                                                                  Sequence 54 AA;
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29-MAR-1999;
01-APR-1999;
06-APR-1999;
08-APR-1999;
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28-APR-1999;
30-APR-1999;
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06-MAY-1999;
07-MAY-1999;
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04-MAY-1999;
05-MAY-1999;
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23-APR-1999;
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99US-0142803P. 99US-0142920P. 99US-0143624P.

99US-0144331P. 99US-0144332P.

99US-0145192P

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990S-0145218P

990S-014524P

990S-0145913P

990S-0145918P

990S-0145918P

990S-014538P

990S-0147302P

990S-0147302P

990S-0147303P

990S-0147303P

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99US-0160815P.
99US-0160980P.
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       23-JUL-1999;
26-UUL-1999;
27-JUL-1999;
27-JUL-1999;
28-JUL-1999;
28-JUL-1999;
02-AUG-1999;
02-AUG-1999;
04-AUG-1999;
04-AUG-1999;
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18-Aug-1999;
20-Aug-1999;
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23-Aug-1999;
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27-AUG-1999;
30-AUG-1999;
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01-SEP-1999
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05-OCT-1999;
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22-OCT-1999;
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29-SEP-1999
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14-OCT-1999
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14-0CT-1999
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13-AUG-19
16-AUG-19
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11-AUG-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New polypeptide designated ORFX are present in human atherogenic cells and are useful to prevent and treat ORFX-associated disorders including cancer, allergy, wound healing or autoimmune, cardiovascular or inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cytostatic; Cardiant; Anti-allergic; Immunosuppressive; Vulnerary; Antiinflammatory; gene therapy; human; ORFX; atherogenic; platelet; human umbilical vein endothelial cell; HUVEC, atherosclerotic plaque; cancer; cardiovascular disease; allergy; autoimmune disease; wound healing; blood coagulation disorder; inflammatory disorder.
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100.0%; Pred. No. ...
... 0; Mismatches
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                                                                                                         99US-0161406P.
99US-0161359P.
99US-0161360P.
99US-0161361P.
99US-01619920P.
                            99US-0160989P.
99US-0161404P.
99US-0161405P.
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99US-0162142P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-NOV-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                    5; Conservative
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(MEHR/) MEHRABAN F.
(CONL) CONLEY P B.
(TOPP/) TOPPER J N.
(LAWD/) LAW D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-626554/67.
N-PSDB; ABQ99170.
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22-OCT-1999;
22-OCT-1999;
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Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic polypeptides. The proteins and their associated DNA sequences are used in the treatment, prevention and diagnosis of medical conditions caused by P. acnes. The disorders include SAPHO syndrome (synovitis, acne, pustulosis, hypertosis and osteomyelitis), uveitis and endophthalmitis. P. acnes is also involved in infections of bone, joints and the central nervous system, however it is particularly involved in the inflammatory lesions associated with acne vulgaris. A method for detecting the presence or absence of P. acnes in a patient comprises contacting a sample with a binding agent that binds to the proteins of the invention and determining the amount of bound protein in the sample. The polypeptides may be used as antigens in the production of antibodies specific for P. acnes proteins. These antibodies can be used to downregulate expression and activity of P. acnes polypeptides and
                                                                                                                                                                                                            0
                     blood
data
condition associated with an ORFX-associated disorder, e.g. cancer, cardiovascular disease, allergy, autoimmune disease, wound healing, bloo coagulation disorders or inflammatory disorders. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from the USPTO web site at sequata.uspto.gov/sequence.html?DocID=20020082206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis; uveitis; endophthalmitis; bone; joint; central nervous system; ELISA; inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay; dermatological; osteopathic; neuroprotectant.
                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Propionibacterium acnes polypeptides and nucleic acids useful for vaccinating against and diagnosing infections, especially useful
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                                                                                                                                                                                                          0; Indels
                                                                                                                                                                         Length 57;
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                                                                                                                                                                         25.0%; Score 5; DB 5; I 100.0%; Pred. No. 3e+02; iive 0; Mismatches 0
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                                                                                                                                                                                                                                                                                                                                                                                AAU46690 standard; protein; 62 AA.
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02-JUN-2000; 2000US-0208841P.
07-JUL-2000; 2000US-0216747P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                              5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Propionibacterium acnes.
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                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                   11 VCQML 15
                                                                                                                                                                                                                                                                                    26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; AAS59534
                                                                                                                                                                                                                                                                                  VCOME
                                                                                                                                        Sequence 57 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                       AAU46690;
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                                                                                                                                                                                                              Matches
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The invention relates to an isolated polymucleotide (ACF64435-ACF64733)

Concoding a Propionibacterium acnes protein. The invention also relates to polypeptides encoded by the polymucleotides (BRM35624-ARM64536) and to immunogenic fragments of P. acnes polypeptides. The invention additionally encompasses expression vectors and host cells comprising a comprehence of the invention, antibodies against polypeptides of the invention, and properties or polymucleotide of the invention, an expension proteins comprising a polypeptide for a P. acnes polypeptide and an isolated T cell population comprising T cells prepared by polymerleotides, antibodies, fusion proteins, T cell populations, or antigen-presenting cells that express the polymerleotide; a method and kit for detecting or determining the presence or absence of P. acnes in a companion, and the presence or absence of P. acnes in a companion, and the development of P. acnes in a continuity and for inhibiting the development of P. acnes in a proteins, T cell populations or antigen-presenting cells that express the proteins, T cell populations or antigen-presenting or treating acne
                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New Propionibacterium acnes polypeptides and polynucleotides encoding the polypeptide, useful for diagnosing, preventing or treating acne vulgaris, or for stimulating an immune response specific for a P. acnes protein.
       aB
therefore treat P. acnes infections. The antibodies may also be used as diagnostic agents for determining P. acnes presence, for example, by enzyme linked immunosorbent assay (ELISA). Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Carter D;
                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Maisonneuve JL;
Jones R, Carte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Propionibacterium acnes predicted ORF-encoded polypeptide #7885.
                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Acne vulgaris; antiseborrhoeic; dermatological; antibacterial;
                                                                                                                                                                                                     Indels
                                                                                                                                                                  Length 62;
                                                                                                                                                     DB 4; Leus
'n. 3.36+02;
0;
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Benson DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; SEQ ID NO 7885; 1481pp; English
                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunostimulant; immune response; vaccine
                                                                                             ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                      Score 5; I
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Persing DH,
Lodes MJ,
                                                                                                                                                                                                                                                                                                                                                                  ABM43209 standard; protein; 62 AA.
                                                                                                                                                       25.0%; Sc._
100.0%; Pre
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Zhang Y, Wang S, Jen S, Lodé
Barth B, Vallieve-Douglass J;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Propionibacterium acnes.
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                                                                                                                                                                                     Local Similarity
les 5; Conserv
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                                                                                                                                  Sequence 62 AA;
                                                                                                                                                                                                                                         1 PRGAP
                                                                                                                                                                                                                                                                            8 PRGAP
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990S-0136392P.
990S-0137222P.
990S-0137528P.
990S-0137502P.
990S-0137724P.
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99US-0139452P.
99US-0139453P.
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99US-0139454P.
99US-0139455P.
99US-0139456P.
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99US-0139468P
99US-0139461P
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99US-0139463P
99US-0139463P
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99US-0140823P.
99US-0140991P.
99US-0141287P.
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990S-0142055P

990S-0142830P

990S-014292P

990S-0142972P

990S-0143542P

990S-0143642P

990S-014408EP

990S-014408EP

990S-0144331P

990S-0144331P

990S-0144334P

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99US-0145086P
99US-0145088P
99US-0145085P
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99US-0145087P
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99US-0140353P.
99US-0140354P.
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9903-0145218P.
9903-014524P.
9903-0145218P.
9903-0145913P.
9903-0145918P.
      20-MAY-1999;
24-MAY-1999;
25-MAY-1999;
25-MAY-1999;
28-MAY-1999;
28-MAY-1999;
28-MAY-1999;
33-JUN-1999;
04-JUN-1999;
06-JUN-1999;
10-JUN-1999;
110-JUN-1999;
110-JUN-1999;
14-JUN-1999;
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18-JUN-1999;
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16-JUN-1999;
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23-JUL-1999;
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       vulgaris, or for stimulating an immune response specific for a P. acnes protein. The polynucleotides can also be used as probes or primers for nucleic acid hybridisation. The vaccine composition is useful for the stimulation of an immune response against P. acnes, or for treating acne, and the kit is useful for performing a diagnostic assay. The present sequence represents a polypeptide predicted to be encoded by an ORF (open reading frame) contained within the P. acnes polynucleotides of the irreading frame) contained within the P. acnes polynucleotides of the irreading frame) the sequence data for this patent din ot form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter; termination sequence.
                                                                                                                                                    Gaps
                                                                                                                                                   .,
                                                                                                                                                  0; Indels
                                                                                                                            25.0%; Score 5; DB 6; Length 62; 100.0%; Pred. No. 3.3e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                             Arabidopsis thaliana protein fragment SEQ ID NO: 78751.
                                                                                                                                                                                                                                     AAG60768 standard; protein; 63 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-0121825P.
99US-0123180P.
99US-0125784P.
99US-0125784P.
99US-012624P.
99US-012624P.
99US-0128234P.
99US-0128234P.
99US-0130077P.
99US-0130077P.
99US-013048P.
99US-0132448P.
99US-01324848P.
99US-0132484P.
99US-0132486P.
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99US-0132486P.
99US-0132486P.
99US-0134218P.
99US-0134218P.
99US-0134218P.
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                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                            Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                       Arabidopsis thaliana
                                                                                                                                                                                      8 PRGAP 12
                                                                                                                                                                   1 PRGAP 5
                                                                                                           Sequence 62 AA;
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23.APR.1999;
23.APR.1999;
24.APR.1999;
30.APR.1999;
04.MAY.1999;
06.MAY.1999;
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05-MAY-1999;
06-MAY-1999;
06-MAY-1999;
07-MAY-1999;
11-MAY-1999;
14-MAY-1999;
14-MAY-1999;
14-MAY-1999;
18-MAY-1999;
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16-APR-1999;
19-APR-1999;
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06-APR-1999;
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9908-0159239P.
9908-0159294P.
9908-0159230P.
9908-0159330P.
9908-0159331P.
9908-0159638P.
9908-0159638P.
9908-0160764P.
9908-0160768P.
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9903-0156596P.
9903-0157117P.
9903-0157865P.
9903-0158029P.
9903-0158232P.
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99US-0161404P.
99US-0161405P.
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99US-0160980P.
99US-0160981P.
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99US-0161359P.
99US-0161360P.
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990S-0147493P.
990S-0147935P.
990S-0148171P.
990S-0148341P.
990S-0148341P.
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9905-0149175P.
9905-0149426P.
9905-0149723P.
9905-0149929P.
9905-0149930P.
9905-0150566P.
9905-0150566P.
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99US-0151930P.
99US-0152363P.
99US-0153070P.
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99US-0154039P.
99US-0154779P.
99US-0155139P.
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99US-0147302P.
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                     99US-0147038P
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               99US-0146389P
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26-OCT-1999;
26-OCT-1999;
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06-AUG-1999;
09-AUG-1999;
02-AUG-1999;
02-AUG-1999;
02-AUG-1999;
03-AUG-1999;
04-AUG-1999;
05-AUG-1999;
05-AUG-1999;
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21-0CT-1999;
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12-AUG-1999;
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18-AUG-1999;
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08-0CT-19
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The invention relates to a nucleic acid probe for measuring human gene expression, comprising any of the 27,400 fully defined nucleotide expression, comprising any of the 27,400 fully defined nucleotide sequences in the specification, or their complements or fragments, and encoding at least 8 amino acids of any of the 6888 amino acid sequences tilly defined in the specification. The probe is a single exon probe that hybridises under high stringency conditions to a nucleic acid molecule expressed in human cells or lissues. Also included are a spatially—addressable set of single exon nucleic acid probes for measuring human center acts of single exon nucleic acid addressably isolatable or amplifiable from the plurality, a single exon microarray for measuring human gene expression, a method of measuring human gene expression, a method of exon microarray for measuring human gene expression, a method of sequences (optionally with conservative amino acid substitutions), an isolated antihody that binds specifically to a peptide cited above.

Contiguous amino acids of any of the above—mentioned amino acid solated antihody that binds specifically to a peptide cited above, methods of selling and/or licensing single exon probes or microarrays to methods of selling the measure gene expression, a method of providing thuman gene expression, a method of providing thuman gene expression, and a computer-readable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New human genome-derived single exon nucleic acid probes useful for human gene expression analysis, for identifying or characterizing alternative splicing events, for assessing genomic alterations or as tools for
                                                                                                                                         ;
0
                                                                                                                                           Gaps
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0
                                                                           Human, gene expression, single exon probe, microarray, alternative splicing event, genomic alteration.
                                                                                                                                                                                                                                                                                                                                                                                                                Human genome derived single exon protein #4743.
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                                                                                                                                                                                                                                                                                                        ABO58509 standard; protein; 63 AA.
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99US-0161361P.
99US-0161920P.
99US-0161992P.
99US-0161993P.
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                                                                       99US-0162142P
                                                                                                                                                                                                                                                                                                                                                                                29-JUL-2004 (first entry)
                                                                                                                                              5; Conservative
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(RANK/) RANK D R.
(HANZ/) HANZEL D K.
                                                                                                                          Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                  28-OCT-1999;
28-OCT-1999;
28-OCT-1999;
29-OCT-1999;
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                                                                                                           Query Match
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                                                                                                                                                                                                                                                                          RESULT
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storage medium which contains a database having a plurality of records clack record including data on the expression of a single exon probe cited above. The probe, methods and apparatus are useful in gene expression analysis. The probes may be used as tools for surveying tissues to detect the presence of expressed messages that contain their specific exon, or in constructing genome-derived single exon microarrays. In addition, the probes are used in identifying and characterising alternative splicing events, in detecting and characterising gross alternations in the genomic locus that includes their exon, in assessing smaller genomic alerations, in priming the synthesis of nucleic acids, or in expressing the ORF encoded peptide. The present sequence is a human time patent did not form part of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at sequence.
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Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 63 AA;
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ABP00767 standard; protein; 64 AA. RESULT 58 ABP00767

25-JUN-2002 ABP00767; 

Human ORFX protein sequence SEQ ID NO:1516.

(first entry)

Human; open reading frame; ORFX; gene therapy; cancer; cirrhosis; hyperproliferative disorder; psoriasis; benign tumour; haemorrhage; degenerative disorder; osteoarthritis; neurodegenerative disorder; cardiovascular disease; diabetes mellitus; systemic lupus erythematosus; hypertension; hypothyroidism; cholesterol ester storage disease; immune deficiency; immune disorder; infectious disease; autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis; myasthenia gravis.

Homo sapiens.

WO200192523-A2.

06-DEC-2001.

29-MAY-2001; 2001WO-US010836.

30-MAY-2000; 2000US-0206132P. 29-AUG-2000; 2000US-0228716P.

(CURA-) CURAGEN CORP.

Leach MD; Shimkets RA,

WPI; 2002-106308/14. N-PSDB; ABN16519. Novel human polypeptides and polynucleotides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and autoimmune disorders.

Disclosure; SEQ ID NO 1516; 1037pp; English.

The present invention describes substantially purified human proteins (referred to as open reading frame, ORFX, where X is 1-11491 (see Table 1 in the specification). ABN15762 to ABN27252 encode the human ORFX

cc treating or preventing a pathology associated with an ORFX-associated disorder in humans, and in the manufacture of a medicament for treating a syndrome associated with ORFX-associated disorder. ORFX polymucleotide syndrome associated with ORFX-associated disorder. ORFX polymucleotide sequences can be used in gene therapy. ORFX sequences can be used in the treatment of cancer, hyperpoliferative disorders, cirrhosis of liver, correstment of cancer, hyperpoliferative disorders, intrhosis of liver, correstment of cancer, hyperpoliferative disorders, haemorrhage, osteoarthritis, neurodegenerative disorders, disorders related to organ transplantation, cardiovascular diseases, disorders related to organ cransplantation, cardiovascular diseases, disorders infectious disease, various immune deficiencies and disorders, infectious disease, autoimmune thyproiditis, mayathenia gravis, graft-versus-host disease and autoimmune thyproiditis, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. ORFX proteins are also useful for treating burns, incisions, ulcers, for treating outset. Corresting disease, and for gut protection or regeneration and treatment of lung or liver fibrosis, corpercation and treatment of lung or liver fibrosis, corpercation in various tissues and conditions resulting from protection or regeneration seties are an expenditions resulting from systemic cytokine damage. Nn B. The sequence data for this patent did not form maxt of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published\_pot\_esquences ; Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter; Gaps ·, 25.0%; Score 5; DB 5; Length 64; 100.0%; Pred. No. 3.3e+02; ive 0; Mismatches 0; Indels 0; Indels Arabidopsis thaliana protein fragment SEQ ID NO: 80257. AAG61788 standard; protein; 65 AA. 99US-0126264P. 99US-0126785P. 99US-0128234P. 99US-0128714P. 99US-0128414P. 99US-0130449P. 99US-0130510P. 99US-0130891P. 99US-0131449P. 99US-0132048P. 99US-0132407P. 99US-0132484P. 99US-0123180P. 99US-0123548P. 25-FEB-2000; 2000EP-00301439 99US-0125788P (first entry) 5; Conservative termination sequence. Arabidopsis thaliana. Best Local Similarity 19 PRGAP 23 1 PRGAP 5 Sequence 64 AA; EP1033405-A2 -MAR-1999; -APR-1999; -APR-1999; 999; 18-OCT-2000 29-MAR-1999; 01-APR-1999; 21-APR-1999; 06-SEP-2000 23-MAR-1999 APR-1999 28-APR-1999 30-APR-1999 30-APR-1999 04-MAY-1999 Query Match AAG61788; APR-1 19-APR-1 Matches RESULT 59 AAG61788 \$ ð g 

US-0132485P US-0132486P US-0132487P US-0134256F US-0134219F US-0134219F US-0134219F US-0134219F US-0134219F US-0134768F US-0134768F US-0134768F US-0135353F US-0135353F	990S-0136782P- 990S-0137222P- 990S-0137222P- 990S-0137724P- 990S-0138644P- 990S-0138644P- 990S-0138647P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139452P- 990S-0139462P- 990S-0139462P- 990S-0139462P- 990S-0139462P- 990S-0139462P- 990S-0139462P- 990S-013962P- 990S-0140823P- 990S-0140833P- 990S-0141842P- 990S-0141842P- 990S-0141842P-	UUS-0142390 UUS-0142803 UUS-0142803 UUS-0142977 UUS-0144085 UUS-0144085 UUS-0144085 UUS-0144335 UUS-0144335 UUS-0144335 UUS-0144335 UUS-0144335 UUS-0144335 UUS-0144484 UUS-0144884 UUS-0144884 UUS-0144884 UUS-0144884
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25.0%; Score 5; DB 5 100.0%; Pred. No. 3.4 ive 0; Mismatches

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Virucide; hepatitis D virus antigen; HDV antigen; RNA polymerase
                                                                                                                                                                                                                                      Hepatitis D virus type II antigen protein fragment, SEQ ID 6.
                                                                                                                    Score 5; DB 3; Length 65;
Pred. No. 3.4e+02;
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99US-0160989P.
99US-0161404P.
99US-0161406P.
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Non-infective cell-requiring method of searching for hepatitis D remedies in a system containing e.g. polypeptide binding to RNA polymerase II with measuring of binding level for indication.
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The present invention relates to a method for searching hepatitis D remedies. The method comprises adding a test compound to a system containing e.g. a hepatitis D virus antigen (HDV antigen) and RNA polymerase II, measuring the binding level of HDV antigen binding to RNA polymerase II, and comparing with a control for selection of a compound hibbiting the binding. The method is for screening remedies for hepatitis D including for hepatitis virus D accompanying hepatitis B, such as gene expression promoters applicable in regeneration medicine for treating organs or tissues. The present sequence is a HDV antigen sednence

Sequence 66 AA;

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14-SEP-2000;
114-SEP-2000;
21-SEP-2000;
25-SEP-2000;
25-SEP-2000;
27-SEP-2000;
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  Human; immune; haematopoietic; immune/haematopoietic antigen; cancer; cytostatic; gene therapy; vaccine; metastasis.
                                               Human immune/haematopoietic antigen SEQ ID NO:11345.
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2000US-0225788P.
2000US-0225681P.
2000US-0226681P.
2000US-022668P.
2000US-022182P.
2000US-022934P.
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          07-NOV-2001 (first entry)
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22-AUG-2000;
23-AUG-2000;
30-AUG-2000;
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04-FBB-2000; 2
4-FBB-2000; 2
02-MAR-2000; 2
116-MAR-2000; 2
117-MAR-2000; 2
119-MAY-2000; 2
111-JUL-2000; 2
11-JUL-2000; 2
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                                                                                                                                                          Homo sapiens
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AAX54951 to AAX64702 encode the human immune/haematopoietic antigen (I)

amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic

cc activity, and can be used in gene therapy and vaccine production. (I)

proteins and polynucleotides may be used in the prevention, diagnosis and

treatment of diseases associated with inappropriate (I) expression. For

example, they may be used to treat disorders associated with decreased

cxample, they may be used to treat disorders associated with decreased

cxample, they may be used to treat disorders patient's genome

that affect the activity of (I) by expressing inactive proteins or to

supplement the patients own production of (I). Additionally, (I)

cc supplement the patients own production of (I). Additionally, (I)

co protein. (I) proteins and polynucleotides may be used to prevent,

cancers and cancer metastases of haematopoietic-derived cells. AAK64703

cancers and cancer metastases of haematopoietic artigen genomic

cancers and cancer metastases of haematopoietic artigen genomic

sequences from the present invention. AAX54942 to AAX64950 and AAM82169

crepresent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                           Nucleic acids encoding human immune/hematopoietic antigen polypeptides, useful for preventing, diagnosing and/or treating cancers and metastasis.
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                                                                                                                                                                                                                                                                                                  Claim 11; SEQ ID NO 11345; 3071pp + Sequence Listing; English
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100.0%; Pred. No. 3.5
ive 0; Mismatches
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                                                                                                                                                    Ruben SM
               08-DEC-2000, 2000US-0251989P.

08-DEC-2000, 2000US-025199P.

11-DEC-2000; 2000US-025409F.

05-JAN-2001, 2001US-025678F.
                                                                                                            (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0-MAY-2001; 2001US-00867550.
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The present invention relates to novel human ORFX polypeptides and their coding sequences (ABP63631-ABP64681 and ABQ98194-ABG99267). The sequences were discovered in human atherogenic cells, in particular in platelets and human unabilities as well. Atherogenic cells are cells which have the potential to develop atherosclerotic plaques. The ORFX polypeptides and nucleic acids are useful for treating or preventing a parthological condition associated with an ORFX-associated disorder, e.g. cancer, cardiovascular disease, allergy, autoimmune disease, wound healing, blood coagulation disorders or inflammatory disorders. Note: The sequence data for this patent did not form part of the printed specification, but was sequate uspto.gov/sequence.html?DocID=20020082206
                                                                                                                                                                               New polypeptide designated ORFX are present in human atherogenic cells and are useful to prevent and treat ORFX-associated disorders including cancer, allergy, wound healing or autoimmune, cardiovascular or inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SAPHO syndrome, synovitis, acne, pustulosis, hypertosis, osteomyelitis, uveitis, endophthalmitis, bone, joint, central nervous system, ELISA, inflammatory lesion, acne vulgaris, enzyme linked immunosorbent assay,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25.0%; Score 5; DB 5; Length 67; 100.0%; Pred. No. 3.5e+02; ive 0; Mismatches 0; Indels
                                                                                                       ů,
                                                                                                       Law
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Propionibacterium acnes immunogenic protein #22618.
                                                                                                   Topper JN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     dermatological; osteopathic; neuroprotectant
                                                                                                                                                                                                                                                           Claim 10; SEQ ID NO 1576; 78pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Skeiky YAW, Persing DH, Mitcham JL,
                                                                                                   Conley PB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU61722 standard; protein; 68 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-APR-2000; 2000US-0199047P.
02-JUN-2000; 2000US-0208841P.
07-JUL-2000; 2000US-0216747P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-APR-2001; 2001WO-US012865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Propionibacterium acnes
                                                                                                 Leach MD, Mehraban F,
(LEAC/) LEACH M D.
(MEHR/) MEHRABAN F.
(CONL/) CONLEY P B.
(TOPP/) TOPPER J N.
                                                                                                                                2002-626554/67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CORI-) CORIXA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRGAP 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PRGAP 5
                                                                                                                                  WPI; 2002-626554
N-PSDB; ABQ98981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 67 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200181581-A2
                                                                 (LAWD/) LAW D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-2001.
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0; Indels DB 4; Length 67; 3.5e+02;

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Bhatia A;

Wang SS,

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N-PSDB; ACF64549.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                  Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic polypeptides. The proteins and their associated DNA sequences are used in the treatment, prevention and diagnosis of medical conditions caused by a cares. The disorders include SAPHO syndrome (synovitis, acne, pustulosis, hypertosis and osteomyelitis), uveitis and endophthalmitis. The acnes is also involved in infections of bone, joints and the central nervous system, however in infections of bone, joints and the central nervous system, however in particularly involved in the inflammatory lesions associated with acne vulgaris. A method for detecting the presence or absence of P. acnes in a patient comprises contacting a sample with a binding agent that binds to the proteins of the invention and determining the amount of bound protein in the sample. The polypeptides may be used as antigens in the production of antibodies can be used to downregulate expression and activity of P. acnes polypeptides and therefore treat P. acnes infections. The antibodies may also be used as diagnostic agents for determining P. acnes presence, for example, by enzyme linked immunosorbent assay (ELISA). Note: The sequence data for this patent did not form part of the printed specification, but was considered in electronic format directly from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Maisonneuve JL;
Jones R, Carter D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                            polypeptides and nucleic acids useful for diagnosing infections, especially useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Propionibacterium acnes predicted ORF-encoded polypeptide #22917.
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                                                                                                                                                                                                                                                                                                                                                                                                                          DB 4; Length 68; 3.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bhatia A,
Benson DR,
   Carter D;
                                                                                                              Example 1; SEQ ID NO 22917; 1069pp; English.
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100.0%; Pred. No. 3.5
ive 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                          ftp.wipo.int/pub/published_pct_sequences
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Lodes MJ,
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   Jen
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Vallieve-Douglass J;
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   L'maisonneuve J, Zhang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Skeiky YAW,
ng S, Jen S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 25.0
Best Local Similarity 100.
Matches 5, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Propionibacterium acnes
                                                               Propionibacterium acnes vaccinating against and
                                                                                          treating acne vulgaris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-381789/36.
                            WPI: 2001-616774/71.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRGAP 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 PRGAP 5
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                                         N-PSDB; AAS59620
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 68 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-0CT-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zhang Y,
Barth B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABM58241;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 65
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The invention relates to an isolated polymudicotide (Arbe443-Arbe473) encoding a Propionibacterium acnes protein. The invention also relates to concoding a Propionibacterium acnes protein. The invention also relates to polymeptides encoded by the polymudicotides (ABM35624-ABM64536) and to immunogenic fragments of P. acnes polypeptides. The invention and to additionally encompasses expression vectors and host cells comprising a diditionally encompasses expression vectors and host cells comprising a polypeptide of the invention; a immune response specific for a P. acnes polypeptide and an isolated T cell population comprising T cells prepared via this method; a vaccine composition (comprising P. acnes polypeptides, artibodies, fusion proteins, T cell populations, or artigen-presenting cells that express the polypeptide); a method and kit for detecting or determining the presence or absence of P. acnes in a confident, and a method for inhibiting the development of P. acnes in a patient. The P. acnes polypeptides, polymedlectides, antibodies, fusion proteins, T cell populations or antigen-presenting cells that express the polypeptides are useful for diagnosing, preventing or treating acne proteins. T cell populations or antigen-presenting cells that express the polypeptides are useful for diagnosing, preventing or treating acnes or protein. The polymuclectides can also be used as probes or primers for nucleic acid hybridisation. The vaccine composition is useful for the stimulating an immune response against P. acnes, or for treating account the kit is useful for performing a diagnostic assay. The present cand the kit is useful for performing a diagnostic assay. The present cand the kit is useful for performing a diagnostic assay. The present canding frame) contained within the P. acnes polymention. So the printed specification, but was obtained in electronic format directly contained in electronic format directly contained in electronic format directly contained in electronic format directly.
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New Propionibacterium acnes polypeptides and polynucleotides encoding the polypeptide, useful for diagnosing, preventing or treating acne vulgaris, or for stimulating an immune response specific for a P. acnes protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter;
                                                                                                                                                                                                                                                        invention relates to an isolated polynucleotide (ACF64435-ACF64733)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 5; DB 6; Length 68;
Pred. No. 3.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Arabidopsis thaliana protein fragment SEQ ID NO: 74689.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25.0%; Scor.
100.0%; Pred. No.
                                                                                                                                                                               Example 1; SEQ ID NO 22917; 1481pp; English
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99US-0123180F.
99US-0123548F.
99US-0125788F.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 68 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-MAR-1999;
09-MAR-1999;
23-MAR-1999;
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9US - 012626 9US - 012678 9US - 012843 9US - 012843 9US - 012843 9US - 013044 9US - 013044 9US - 013044 9US - 013049 9US - 013049	905 - 013248 905 - 013248 905 - 013286 905 - 013286 905 - 013286 905 - 013286 905 - 013421 905 - 013421	113.948.01 113.948.01 113.948.01 113.948.01 113.948.01 113.948.01 113.948.01 113.948.01 114.01
5-MAR-1999; 9-MAR-1999; 11-APR-1999; 6-APR-1999; 6-APR-1999; 6-APR-1999; 11-APR-1999; 3-APR-1999; 8-APR-1999; 9-APR-1999; 9-APR-1999; 9-APR-1999; 9-APR-1999; 9-APR-1999;	- MAX - 1999; - JUN - 1999; -	0.000 1999; 0.000
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990S-0144086P 990S-0144312P 990S-0144331P 990S-0144331P 990S-0144334P 990S-0144334P 990S-0144334P 990S-0144334P 990S-0144334P 990S-0144684P 990S-0145080P 990S-014702P 990S-014930P 990S-014930P 990S-014930P 990S-014930P 990S-014930P 990S-014930P 990S-014930P 990S-0150866P 990S-0151080P 990S-0155659P

16-UUL-1999;
19-UUL-1999;
19-UUL-1999;
19-UUL-1999;
19-UUL-1999;
20-UUL-1999;
20-UUL-1999;
21-UUL-1999;
22-UUL-1999;
23-UUL-1999;

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The invention relates to human polymucleotides (AAI79941-AAI93841) and the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to cytokine, cell proliferation or cell differentiation or which may induce production of other cytokines in other cell populations. The prolypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, e.g. stem cell growth factor activity, immunomodulatory activity and activity, tissue growth factor activity, immunomodulatory activity and activity, inhibin activity and may be useful in the diagnosis and/or treatment of cancer, lenkseemia, nervous system disorders, arthiftis and inflammation. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                             ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic polypeptides. The proteins and their associated DNA sequences are used in
Isolated nucleic acids and polypeptides, useful for preventing diagnosing and treating e.g. leukemia, inflammation and immune disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis; uveitis; endophthalmitis; bone; joint; central nervous system; ELISA; inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay; dermatological; osteopathic; neuroprotectant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Propionibacterium acnes polypeptides and nucleic acids useful for vaccinating against and diagnosing infections, especially useful for treating acne vulgaris.
                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                              0;
                                               Claim 20; SEQ ID NO 24408; 1399pp + Sequence Listing; English.
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                                                                                                                                                                                                                                                                                                                                  DB 4; Le...
Mo. 3.6e+02;
0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Propionibacterium acnes immunogenic protein #25355.
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rter D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; SEQ ID NO 25654; 1069pp; English.
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, Jen S, Carter
                                                                                                                                                                                                                                                                                                                                                25.0%; Score 5; DB 4
100.0%; Pred. No. 3.6
tive 0; Mismatches
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02-JUN-2000; 2000US-0208841P.
07-JUL-2000; 2000US-0216747P.
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L'maisonneuve J, Zhang Y,
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100.0%;
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990S-015923P.
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990S-0159331P.
990S-0159638P.
990S-0159638P.
990S-0160741P.
990S-016074P.
990S-016076P.
990S-0160815P.
990S-0160815P.
990S-0160815P.
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99US-0161359P.
99US-0161360P.
99US-0161361P.
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18-MAY-2000; 2000US-00577409.
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                                            99US-0159293P
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N-PSDB; AAI90447.
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nes 5; Conserv
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22-0CT-1999;
22-0CT-1999;
25-0CT-1999;
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14-OCT-1999;
14-OCT-1999;
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13-OCT-1999;
13-OCT-1999;
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Matches
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the treatment, prevention and diagnosis of medical conditions caused by P. acnes. The disorders include SAPHO syndrome (synovitis, acne, p. acnes is also involved in infections of bone, joints and chapthalantis.

P. acnes is also involved in infections of bone, joints and the central nervous system, however it is particularly involved in the inflammatory lesions associated with acne vulgaris. A method for detecting the presence or absence of P. acnes in a patient comprises contacting a sample with a binding agent that binds to the proteins of the invention of and determining the amount of bound protein in the sample. The polypeptides may be used as antigens in the production of antibodies specific for P. acnes proteins. These antibodies can be used to downsequlate expression and activity of P. acnes polypeptides and therefore treat P. acnes infections. The antibodies may also be used as diagnostic agents for determining P. acnes presence, for example, by the contact in a say (ELISA). Note: The sequence data for the increase presence in the sample of the contact of the c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
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Sequence 71 AA;

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DB 4; Length 71;
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ches 0; Indels
25.0%; Score 5; DB 4
100.0%; Pred. No. 3.6
iive 0; Mismatches
                            5; Conservative
 Query Match
Best Local Similarity
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Gaps

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ABM60978 standard; protein; 71 20-OCT-2003 

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(first entry)

Propionibacterium acnes predicted ORF-encoded polypeptide #25654. Acne vulgaris; antiseborrhoeic; dermatological; antibacterial;

mmunostimulant; immune response; vaccine

Propionibacterium acnes.

WO2003033515-A1.

24-APR-2003

11-OCT-2002; 2002WO-US032727.

15-OCT-2001; 2001US-00978825.

(CORI-) CORIXA CORP.

Maisonneuve JL; Jones R, Carter D; Persing DH, Bhatia A, Lodes MJ, Benson DR, Mitcham JL, Skeiky YAW, Persi Zhang Y, Wang S, Jen S, Lodk Barth B, Vallieve-Douglass J; Skeiky YAW, Po

WPI; 2003-381789/36. N-PSDB; ACF64573. New Propionibacterium acnes polypeptides and polynucleotides encoding the polypeptide, useful for diagnosing, preventing or treating acne vulgaris, or for stimulating an immune response specific for a P. acnes protein.

Example 1; SEQ ID NO 25654; 1481pp; English.

encoding a Propionibacterium acmes protein. The invention also relates to polypeptides encoded by the polynucleotides (ABM35624-ABM64536) and to immunogenic fragments of P. acmes polypeptides. The invention additionally encompasses expression vectors and host cells comprising a invention relates to an isolated polynucleotide (ACF64435-ACF64733)

Claim 27; SEQ ID NO 19153; 487pp; English

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polynucleotide of the invention; antibodies against polypeptides of the invention; invention; fusion proteins comprising a polypeptide of the invention; a method for stimulating an immune response specific for a P. acnes polypeptide and an isolated T cell population comprising T cells prepared via this method; a vaccine composition (comprising T cells prepared to this method; a vaccine composition (comprising T cells prepared or athis method; a vaccine composition (comprising T cells prepared antigen-presenting cells that express the polypeptide); a method and kit for detecting or determining the presence or absence of P. acnes in a patient; and a method for inhibiting the development of P. acnes in a patient. The P. acnes polypeptides, polypucleotides, antibodies, fusion proteins, T cell populations or antigen-presenting cells that express the colypeptides are useful for diagnosing, preventing or treating acnes vulgaris, or for stimulating an immune response specific for a P. acnes protein. The polymucleotides can also be used as probes or primers for mucleic acid hybridisation. The vaccine composition is useful for the relimination of minimulations.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 stimulation of an immune response against P. annes, or for treating acne, and the kit is useful for performing a diagnostic assay. The present sequence represents a polygeptide predicted to be encoded by an ORF (open reading frame) contained within the P. acnes polymucleotides of the invention. Note: The sequence data for this partent did not form part of the printed specification, but was obtained in electronic format directly
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptide #761 encoded by probe for measuring cervical gene expression.
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; 2000US-00632366;
; 2000US-0234687P;
; 2000US-0236359P;
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26-MAY-2000; 2000US-0207456P.
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Best Local Similarity
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27-SEP-2000;
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The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foctal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a peptide encoded by a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human genome-derived single exon nucleic acid probes useful for analyzing
          The present invention relates to human single exon nucleic acid probes (SENP: see AAI10068-AAI28459). The present sequence is a peptide encoded by one such probe. The SENPS are derived from human Heia cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     foetal liver; gene expression; single exon nucleic acid probe.
                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide #780 encoded by human foetal liver single exon probe.
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                                                                                                                                                                                                                             DB 4; Length 72; 3.7e+02; ches 0; Indels
                                                                                                                                                                                                                                   25.0%; Score 5; DB 4
100.0%; Pred. No. 3.7
ive 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                        ABB33274 standard; peptide; 72 AA.
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21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
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Best Local Similarity luv...
5, Conservative
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                                                                                                                                                                                                     Sequence 72 AA;
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Sequence 72 AA;

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                                                                                                                                                                                                       Peptide #774 encoded by probe for measuring placental gene expression.
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                        Indels
                                                                                                                                                                                                                              microarray; human; placenta; antenatal diagnosis;
Length 72;
 25.0%; Score 5; DB 4; Le: 100.0%; Pred, No. 3.7e+02;
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100.0%; Pred. No. 3.7
tive 0; Mismatches
                        0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rank DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene expression in human placenta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB28100 standard; peptide; 72 AA.
                                                                                                                                   AAM26737 standard; protein; 72 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MOLE-) MOLECULAR DYNAMICS INC.
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30 JUN-2000; 2000US-00608498.
03-AUG-2000; 2000US-0063346879.
21 SEP-2000; 2000US-02346879.
27-SEP-2000; 2000US-0236359P.
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                                                                                                                                                                                    entry)
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                           Conservative
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                                                                                                                                                                                   (first
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Best Local Similarity
               Best Local Similarity
Matches 5; Conserv
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                                                                          PRGAP 20
                                                  1 PRGAP 5
                                                                                                                                                                                                                                               genetic disorder
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04-OCT-2000;
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                                                                                                                                                                                                                                                                        Homo sapiens
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   Query Match
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ID ABB2
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The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart (see ABA2135-ABA41305). The present sequence is a protein encoded by one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenical heart disease. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
              Protein #735 encoded by probe for measuring heart cell gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Single exon nucleic acid probes for analyzing gene expression in human
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                                                            Human, gene expression, heart, microarray, vascular system, cardiovascular disease, hypertension, cardiac arrhythmia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25.0%; Score 5; DB 4; Length 72; 100.0%; Pred. No. 3.7e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 15; SEQ ID NO 20506; 530pp; English.
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26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-0258366.
21-SEP-2000; 2000US-0224859P.
27-SEP-2000; 2000US-0224359P.
04-OCT-2000; 2000GB-00024263.
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                                                                                                                          congenital heart disease
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Best Local Similarity 100.
Matches 5; Conservative
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                                                Human peptide #751 encoded by breast cell single exon nucleic acid probe.
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                                                                                                      Human; microarray; single exon probe; gene expression; breast; disease;
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30-JUN-2000; 2000US-0201466P.
03-AUG-2000; 2000US-023366.
21-SEP-2000; 2000US-023468PP.
27-SEP-2000; 2000US-023468PP.
04-OCT-2000; 2000GB-00024263.
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(first entry)
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5; Conserv
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01-FEB-2002
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Matches 5;
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3.7e+02; nes 0; Indels

RESULT 74 ABB18736

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The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is a protein encoded by one of the probes of the invention
                                                                                                                                                                                                                                                                                                                   Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human bone marrow.
                                                                                                                                                                                                                                                                                                                                                                        Example 4; SEQ ID NO 26762; 658pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 25.0%; Score 5; DB 4; Length 72; Best Local Similarity 100.0%; Pred. No. 3.7e+02; Matches 5; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                      Rank DR;
                                                                             04-FEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-0053266.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0234687P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                        (MOLE-) MOLECULAR DYNAMICS INC.
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                                                30-JAN-2001; 2001WO-US000668.
                                                                                                                                                                                                                                                        Penn SG, Hanzel DK,
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                09-AUG-2001
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Gaps

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Search completed: October 26, 2004, 07:16:20 Job time : 92 secs

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Sequence 120828,

Sequence 35124, A Sequence 4593, A Sequence 3666, A Sequence 267231, Sequence 267231, Sequence 1576, Appleaguence 1594, Appleaguence 1576, Appleaguence 1576, Appleaguence 1576, Appleaguence 1576, Appleaguence 1676, Appleaguence 1678, Sequence 165389, Sequence 240184, Sequence 772, Appleaguence 240184, Sequence 772, Appleaguence 18176, Sequence 18176, Appleaguence 18176, Appleaguence 18176, Sequence 18176, Sequence 18176, Sequence 18176, Appleaguence 18176, Ap

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08-10-815-514-6

08-10-815-514-6

08-10-815-514-6

08-10-437-963-204604

4 US-10-424-599-267231

4 US-10-424-599-262093

US-09-424-599-262093

US-09-867-550-1954

5 US-10-424-599-264712

4 US-10-424-599-125702

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Sequence 3, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 23, Appl
Sequence 4341, Ap
Sequence 67611, A
Sequence 67611, A
Sequence 26, Appl
Sequence 2869, Ap
Sequence 528, App
Sequence 634, App
Sequence 634, App
Sequence 634, App
                                                                              October 26, 2004, 07:22:37; Search time 65 Seconds (without alignments) 99.618 Million cell updates/sec
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S US-10-479-334-26

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7168, Ap 153530,

Sequence 1272 Sequence 1153 Sequence 1273 Sequence 2170 Sequence 1535 Sequence 1535 Sequence 154 Sequence 154 Sequence 154 Sequence 154

47642, A 15, Appl 142846,

157410,

159333, 134702, 8165, Ap

Sequence 1 Sequence 8 Sequence 1

303, App 104856, 267655, 1456, Ap

Sequence 303 Sequence 105 Sequence 267

Sequence 1456, Ap Sequence 185681, Sequence 187877, Sequence 195845,

Sequence 280, App Sequence 144416, Sequence 131328, Sequence 184086,

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60687, A 46232, A 216376,

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Sequence 4, Application US/10066965A

| Sequence 4, Application US/20030143626A1
| Publication No. US20030143626A1
| GENERAL INFORMATION:
| APPLICANT: COLAS, PIERER
| APPLICANT: COLAS, PIERER
| APPLICANT: COHEN, BARAK A.
| TITLE OF INVENTION: TARGETED MODIFICATION OF INTRACELLULAR COMPOUNDS
| FILE REFERENCE: ESTY 3.0-015
| CURRENT APPLICATION NUBER: US/10/066,965A
| CURRENT FILING DATE: 2002-12-09
| NUMBER OF SEQ ID NOS: 33
| SOFTWARE: PatentIn Ver. 2.1
| SEQ ID NO 4
| LENGTH: 20
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Publication No. US20030143626A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
FULL APPLICANT:
COLEN, BARAK A.

TITLE OF INVENTION: TARGETED MODIFICATION OF INTRACELLULAR COMPOUNDS
FILE REFERENCE: EGYP 3.0-015
CURRENT PILING DATE: 2002-12-09
NUMBER OF SEQ ID NOS: 33
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic is OTHER INFORMATION: peptide US-10-066-965A-23
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 Length 20;
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; Pred. No. 4.1e-15;
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Pred. No. 0.76;
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100.0%; Pr
tive 0;
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    Query Match
Best Local Similarity 100.0%;
Matches 20; Conservative 0
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ORGANISM: Artificial Sequence
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Best Local Similarity 100.
Matches 7; Conservative
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LENGTH: 20
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                                                     Sequence 259958,
Sequence 1953, Ap
Sequence 143716,
Sequence 161234,
Sequence 157405,
Sequence 182171,
                       Sequence 57670, A
Sequence 122028,
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Sequence 281122,
Sequence 128134,
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Sequence 118153,
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Substitution No. US20030143626A1

SUBSTITUTION OF US20030143626A1

SUBSTITUTION OF USERNE

APPLICANT: COLAS, PIERRE

APPLICANT: COHEN, BARAK A.

TITLE OF INVENTION: TARGETED MODIFICATION OF INTRACELLULAR COMPOUNDS

FILE REPRENCE: EXPY 3.0-015

CURRENT APPLICATION NUMBER: US/10/066,965A

CURRENT FILING DATE: 202-12-09

NUMBER OF SEQ ID NOS: 33

SOFTWARE: PATENTIN VET. 2.1
            Sequence
Sequence
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                                        US-10-437-963-122028
US-10-424-599-259958
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US-10-437-963-143716
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US-10-437-963-157405
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US-10-767-701-57670
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US-10-437-963-128134
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100.0%; Score 20; DE
Best Local Similarity 100.0%; Pred. No. 4.1
Matches 20; Conservative 0; Mismatches
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ORGANISM: Artificial Sequence
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US-10-066-965A-3
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LENGTH: 20
      TYPE: PRT
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APPLICANT: Everalist David K.
APPLICANT: Screen, Steven E
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313) B
CURRENT APPLICATION NUMBER: US/10/425,114
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 67611
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APPLICANT: YAMANAKA, Shinya
APPLICANT: KATHO, Hideko
ITILE OF INVENTION: GENES WITH ES CELL-SPECIFIC EXPRESSION
FILE REFERENCE: 225475
CURRENT APPLICATION NUMBER: US/10/479,334
CURRENT FILING DATE: 2003-12-01
PRIOR APPLICATION NUMBER: PCT/JP02/05350
PRIOR FILING DATE: 2002-05-31
PRIOR APPLICATION NUMBER: UP 2001-165927
PRIOR FILING DATE: 2001-05-31
NUMBER OF SEQ ID NOS: 44
SOFTWARE: PATENTIN NUMBER: J201-05-31
SEQ ID NO 26
LENGTH: 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 30.0%; Score 6; DB 15; Length 262; Best Local Similarity 100.0%; Pred. No. 73; Matches 6; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Clone ID: LIB3279-023-E7_FLI.pep US-10-425-114-67611
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 26, Application US/10479334 ; Publication No. US20040137460A1
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Gibson, Bradford W.
Taylor, Steven W.
Glenn, Gary M.
Warnock, Dale E.
                          Zhou, Yihua
Kovalic, David K.
Screen, Steven E
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.
Matches 6; Conservative
Liu, Jingdong
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US-10-479-334-26
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ORGANISM: Zea mays
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                          APPLICANT:
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APPLICANT: La Rosa, Thomas J.
APPLICANT: Ed. Vilua
APPLICANT: Zhou, Yihua
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Wu, Wei
APPLICANT: Boukharov, Andrey A.
APPLICANT: Boukharov, Andrey A.
APPLICANT: Barbazuk, Brad
APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE REFERENCE: 38-21(53221)B
CURRENT APPLICATION NUMBER: US/10/437,963
UNRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 114356
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                                                         JUDICATION OF USE OF THE PRIOR OF THE PRIOR OF THE PRIOR FILING DATE:

J. SEQUENCE 4341, Application US/10264049

J. Publication No. US2040005579A1

GENERAL INFORMATION:

J. TITLE OF INVENTION:

J. TITLE OF TITLE OF THE TITLE 
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US-10-437-963-114356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 114356, Application US/10437963
Publication No. US20040123343A1
GENERAL INFORMATION:
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Best Local Similarity 100.0
Matches 6; Conservative
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Best Local Similarity 100.
Matches 6; Conservative
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; ORGANISM: Homo sapiens
US-10-264-049-4341
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ORGANISM: Oryza sativa
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          RESULT 5
US-10-264-049-4341
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ÚS-09-834-765-583
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US-09-834-765-583
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US-10-280-066-66
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; Sequence 528, Application US/09834765
; Patent No. US2020055478A1
; GENERAL INFORMATION:
    APPLICANT: Mary Faris
    APPLICANT: Bary Faris
    APPLICANT: Arthur B. Raitano
    APPLICANT: Arthur B. Arthur B. Arthur G. Art
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Patent No. US20020055478A1

GENERAL INFORMATION:

APPLICANT: Mary Faris

APPLICANT: Arthur B. Raitano

APPLICANT: Steve Chappell Mitchell

APPLICANT: Arthur B. Raitano

APPLICANT: Arthur B. Raitano

TITLE OF INVENTION: GTP-BINDING PROTEIN USEFUL IN TREATMENT

TITLE OF INVENTION: APA DEFECTION OF CANCER

TITLE OF INVENTION: AND DETECTION OF CANCER

FILE REFERENCE: 129-64501

CURRENT APPLICATION NUMBER: US/09/834,765

CURRENT FILING DATE: 2001-09-21
TITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION
TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
FILE REFERENCE: 660088.465
CURRENT APPLICATION NUMBER: US/10/408,765A
CURRENT FILING DATE: 2003-04-04
NUMBER OF SEQ ID NOS: 3077
SOFTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
30.0%; Score 6; DB 16; Length 731;
Best Local Similarity 100.0%; Pred. No. 1.66+02;
Matches 6; Conservative 0; Mismatches 0; Indels
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100.0%; Pred. No. 1.2
:ive 0; Mismatches
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ORGANISM: Homo sapiens
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ORGANISM: Homo sapiens
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US-09-834-765-634
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US-09-834-765-528
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LENGTH: 731
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Sequence 883, Application US/09834765

Sequence 884, Application US/09834765

Sequence 884, Application US/09834765

GENERAL INFORMATION:

APPLICANT: Mary Faris land

APPLICANT: Arthur B. Raitano

APPLICANT: Arthur B. Raitano

APPLICANT: Apa Jakobovits

TITLE OF INVENTION: GTP-BINDING PROFEIN USEFUL IN TREATMENT

TITLE OF INVENTION: GTP-BINDING PROFEIN OF CANCER

FILE REFERENCE: 129.6USU1

CURRENT FILING DATE: 2001-04-12

PRIOR PLING DATE: 2000-04-12

NUMBER OF SEQ ID NOS: 770

SOFTWARE: FASISEQ for Windows Version 4.0

SSEQ ID NOS: 770

SSEQ ID NOS: 8384580
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PRIOR APPLICATION NUMBER: 60/197,647
PRIOR FILING DATE: 2000-04-12
NUMBER OF SEQ ID NOS: 770
SCFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 634
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Best Local Similarity 100.
Matches 5; Conservative
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US-09-834-765-634
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Best Local Similarity
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Sequence 35124, Application US/09864761

Patent No. US20020048763A1

GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Hanzel, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                        Gaps
                                                                                                                                        0;
                                                                    25.0%; Score 5; DB 16; Length 44; 100.0%; Pred. No. 2.2e+02; Live 0; Mismatches 0; Indels
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EXPRESSED IN BT474, SIGNAL = 1.5
EXPRESSED IN FETAL LIVER, SIGNAL = 1.8
EXPRESSED IN HBL100, SIGNAL = 1.1
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CURRENT APPLICATION NUMBER: US/99/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR FILING DATE: 2000-05-04
PRIOR FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR PLING DATE: 2000-06-03
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-09-03
PRIOR FILING DATE: 2000-09-03
PRIOR FILING DATE: 2000-09-03
PRIOR FILING DATE: 2000-09-03
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR PLING DATE: 2001-01
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OTHER INFORMATION: EXPRESSED IN PLACEN
OTHER INFORMATION: EXPRESSED IN BT474,
                                                                                                                               5; Conservative
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ORGANISM: Homo sapiens
                                                                                                 Best Local Similarity
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OTHER INFORMATION:
OTHER INFORMATION:
                 US-10-437-963-120828
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APPLICANT: Boukharov, Andrey A.
APPLICANT: Barbazuk, Brad
APPLICANT: Li, Fing
APPLICANT: Li, Fing
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 120828
LENGTH: 44
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CRGANISM: Oryza sativa
FEATURE:
OTHER INFORMATION: Clone ID: PAT_MRT4530_23912C.1.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 116, Application US/10231417
Publication No. US2030176681A1
GENERAL INFORMATION:
JAPPLICATION No. US2030176681A1
FILE REFERENCE: PZ01991
CURRENT APPLICATION NUMBER: US/10/231,417
CURRENT FILING DATE: 2002-08-30
PRIOR APPLICATION NUMBER: US/09/296,622
PRIOR FILING DATE: 1999-04-23
NUMBER OF SEQ ID NOS: 619
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 416
LENGTH: 28
                                                                                                                                                                                                                                                                                  25.0%; Score 5; DB 1.100.0%; Pred. No. 1.2 Live 0; Mismatches
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Sequence 120828, Application US/10437963
Publication No. US20040123343A1
SEMERAL INFORMATION:
APPLICANT: La Rosa, Thomas J.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Boukharov, Andrey A.
APPLICANT: Boukharov, Andrey A.
                                                                                                                                                                  ; NAME/KEY: MISC_FEATURE
; OTHER INFORMATION: DGI-2-20R-4-G114
US-10-280-066-66
SOFTWARE: Patentin version 3.1
SEQ ID NO 66
LENGTH: 20
                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 5, Conservative
                                                                                                             ORGANISM: Escherichia coli
FEATURE:
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Best Local Similarity 100.
Matches 5; Conservative
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ORGANISM: Homo sapiens
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                                                                                     TYPE: PRT
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Sequence 38656, Application US/09864761
; Sequence 38656, Application US/09864761
; Sequence 38656, Application US/09864761
; Sequence 38656, Application General Information:
    APPLICANT: Pank, David R.
    APPLICANT: Rank, David R.
    APPLICANT: Rank, David R.
    APPLICANT: Gren, Wensheng
    TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR ITLE DE INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR FILE REFERENCE: Acond.ca.A.
    TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR FILE REFERENCE: Acond.ca.A.
    TITLE OF INVENTION NUMBER: US 60/180,312
    PRIOR PILING DATE: 2000-05-26
    PRIOR PILING DATE: 2000-05-26
    PRIOR PILING DATE: 2000-05-26
    PRIOR PILING DATE: 2000-06-03
    PRIOR FILING DATE: 2000-08-03
    PRIOR PILING DATE: 2000-10-04

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                       MAP TO AC005323.1

EXPRESSED IN PLACENTA, SIGNAL = 2.2

EXPRESSED IN BRAIN, SIGNAL = 4.6

EXPRESSED IN ADULT LIVER, SIGNAL = 1.9

EXPRESSED IN FETAL LIVER, SIGNAL = 1.7

EXPRESSED IN HELA, SIGNAL = 1.7

EXPRESSED IN HELA, SIGNAL = 1.2e+02

EXTRESSED IN LUNG, SIGNAL = 1.2e+02
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Pred. No. 2.3e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
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APPLICANT: Mayhew, Mark
APPLICANT: Mayhew, Mark
TITLE OF INVENTION: KDEL RECEPTOR INHIBITORS
FILE REFERENCE: 31488
FILE REFERENT FILING DATE: 2004-03-31
PRIOR APPLICATION NUMBER: US/09/696,872
PRIOR APPLICATION NUMBER: US/09/696,872
PRIOR APPLICATION NUMBER: US/09/696,872
NUMBER OF SEQ ID NOS: 42
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                           25.0%; Score 5; DB 9
100.0%; Pred. No. 2.3
:ive 0; Mismatches
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100.0%; Pre
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                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100..
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                       OTHER INFORMATION: EXCIPER INF
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Best Local Similarity
Matches 5; Conserv
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LENGTH: 46
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Sequence 45993, Application US/09864761

Repaire No. USCO200049753A1

GENERAL INFORMATION: Harm, SHARTCH G.

APPLICANT: Rank, David K.

APPLICANT: Rank, David K.

APPLICANT: Chen, Wensheng

TITLE OF INVENTION: HARMS GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

FILLS REPRENDED. AAGOING A. T.

CURRENT FILLING DATE: 2000-02-04

PRIOR PAPLICATION NUMBER: US/09/864,761

CURRENT FILLING DATE: 2000-03-04

PRIOR FILLING DATE: 2000-03-04

PRIOR FILLING DATE: 2000-03-04

PRIOR PAPLICATION NUMBER: PCT/USO1/0066

PRIOR PLILING DATE: 2001-01-30

PRIOR PRILING DATE: 2001-01-3
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0
EXPRESSED IN HELA, SIGNAL = 1.2
EXPRESSED IN HEART, SIGNAL = 0.99
EXPRESSED IN LUNG, SIGNAL = 1.2
EXPRESSED IN BONE MARROW, SIGNAL = 1.3
EXPRESSED IN ADULT LIVER, SIGNAL = 1.1
EST_HUMAN HIT: R77154.1, EVALUE 1.00e-08
                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                     25.0%; Score 5; DB 9; Length 46; 100.0%; Pred. No. 2.3e+02; iive 0; Mismatches 0; Indels
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SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
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Best Local Similarity 100.
Matches 5; Conservative
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ORGANISM: Homo sapiens
       CTHER INFORMATION: B
COTHER INFORMATION: B
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LENGTH: 46
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APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Show Yihua
APPLICANT: Show Yihua
APPLICANT: Car Vongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 39-21(53223)
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
LENGTH: 51
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| Publication No. US20030044825A1
| GENERAL INPORMATION:
| APPLICANT: IMAI, Yuji
| APPLICANT: AKATSUKA, Hiroyuki
| APPLICANT: Kenji
| APPLICANT: AKATSUKA, Hiroyuki
| APPLICANT: ANAKA, No. US20030044825A11yuki
| APPLICANT: SANAKA, No. US20030044825A11yuki
| FILE OF INVENTION: Bone Metabolism Related Protein and Gene Thereof
| FILE APPLICANT: NOWBER: US 60/292,318
| FILE APPLICANTION NUMBER: US 60/292,318
| FILE APPLICANTION NUMBER: UP 318226/1998
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                                                                                                                                                                                                                                                                                                                                    25.0%; Score 5; DB 16; Length 50; 100.0%; Pred. No. 2.4e+02; tive 0; Mismatches 0; Indels
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OTHER INFORMATION: Clone ID: PAT_MRT4530_99675C.1.pep
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US-10-424-599-267231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 267231, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
              NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 204604
LENGTH: 50
                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 100.
Matches 5; Conservative
                                                                                                                      TYPE: PRT
ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Glycine max
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APPLICANT: Zhou, Yihua
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Wei
APPLICANT: Wu, Wei
APPLICANT: Boukharov, Andrey A.
APPLICANT: Barbazuk, Brad
APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21 (53221) B
CURRENT APPLICATION NUMBER: US/10/437,963
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OTHER INFORMATION: MAP TO ACO06024.1
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1.6
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 1.5
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.2
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 1.2
OTHER INFORMATION: EXPRESSED IN BOUL BRAIN.
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.3
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.2
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.2
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.4
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.4
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                                                                             PRIOR APPLICATION NUMBER: PCI/USU1/USES
PRIOR APPLICATION NUMBER: PCT/USO1/00667
PRIOR APPLICATION NUMBER: PCT/USO1/00664
PRIOR PILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR APPLICATION NUMBER: DCT/US01/00670
PRIOR PILING DATE: 2001-01-30
PRIOR FILING DATE: 2000-06-30
PRIOR FILING PRIOR P
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Publication No. US2004012334341
GENERAL INFORMATION:
APPLICANT: La Rosa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: Cao, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Boukharov, Andrey A.
APPLICANT: Boukharov, Andrey A.
APPLICANT: Barbazuk, Brad
                         FILING DATE: 2000-09-27
APPLICATION NUMBER: PCT/US01/00666
APPLICATION NUMBER: US 60/236,359
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Best Local Similarity 100...
5, Conservative
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13 PRGAP 17
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US-10-437-963-204604
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US-09-864-761-38656
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APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Kovalic David K
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
                                                                                                                                             Sequence 219441, Application US/10424599
; Bequence 219441, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
; APPLICANT: Kovalic David K
; APPLICANT: ADAINATION Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; TITLE OF INVENTION: 1916424,599
; CURRENT APPLICATION NUMBER: US/10/424,599
; NUMBER OF SEQ ID NOS: 285684
; NUMBER OF SEQ ID NOS: 285684
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 5; DB 15; Lengtu 5/,
Pred. No. 2.7e+02;
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US-10-424-599-264712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Clone ID: PAT_MRT3847_40181C.1.pep
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100.0%; Pred. No. ...
'-- 0; Mismatches
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; Publication No. US20040031072A1
; GENERAL INFORMATION
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US-10-029-386-32143
; Sequence 32143, Application US/10029386
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Best Local Similarity
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Best Local Similarity
Matches 5; Conserv
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         11 VCQML 15
                                                 22 VCQML 26
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US-10-424-599-219441
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APPLICANT: Leach, Martin D.
APPLICANT: Leach, Debbie
APPLICANT: Law, Debbie
CURRENT APPLICATION NUMBER: US/09/867,550
CURRENT FILING DATE: 2000-05-30
NUMBER OF SEQ ID NOS: 2125
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1954
LENGTH: 57
                                                                                                                                                                                                                                                                                                                   Sequence 262093, Application US/10424599

Publication No. UG20040031072A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J

APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILLE REPRENCE: 38-21(5323)8

CURRENT APPLICATION NUMBER: US/10/424,599

CURRENT FILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 285684
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                                                                               Length 54;
                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Clone ID: PAT_MRT3847_78692C.1.pep
US-10-424-599-262093
                                                                           25.0%; Score 5; DB 14; L. 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1954, Application US/09867550 Patent No. US20020082206A1
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Best Local Similarity 100.
Matches 5; Conservative
                                                                                                     Best Local Similarity 100.
Matches 5, Conservative
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US-09-867-550-1954
                     ORGANISM: Mus musculus
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                                                                                                                                                                                                                     RGAPM 8
                                                                                                                                                                                                                                                                                          RESULT 23
US-10-424-599-262093
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LENGTH: 56
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                                          US-10-152-031-13
                                                                                      Query Match
TYPE: PRT
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Sequence 1576, Application US/09867550

Patent No. US20020082206A1

GENERAL INFORMATION:

APPLICANT: Leach, Martin D.

APPLICANT: Leach, Martin D.

APPLICANT: Law, Debbie

APPLICANT: Conley, Pamela

APPLICANT: Topper, James

TITLE OF INVENTION: No. US20020082206A1e1 Polynucleotides from Atherogenic Cells and I

TITLE OF INVENTION: Thereby

TITLE OF INVENTION: Thereby

FILE REFERENCE: 21402-013 (Cura-313)

CURRENT APPLICATION NUMBER: US/09/867,550

CURRENT FILING DATE: 2001-09-20

PRIOR APPLICATION NUMBER: USN 60/208,427

PRIOR APPLICATION NUMBER: USN 60/208,427

PRIOR FILING DATE: 2000-05-30

NUMBER OF SEQ ID NOS: 2125

SOFTWARE: FastSEQ for Windows Version 4.0

LENGTH: 67
                                                                                                 TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement FILE REFERENCE: 38-21(53233)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 225320
LENGTH: 66
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APPLICANT: La Rosa Thomas J
APPLICANT: La Rovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
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                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Clone ID: PAT_MRT3847_45494C.1.pep
US-10-424-599-225320
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, Pred. No. 3e+02;
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100.0%; Pred. No. sc.
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              La Rosa Thomas J
Kovalic David K
Zhou Yihua
Cao Yongwei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5; Conservative
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US-09-867-550-1576
                                                                                                                                                                                                                                                                                                           ORGANISM: Glycine max
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Best Local Similarity
Matches 5; Conserv
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                                                        APPLICANT:
APPLICANT:
                                     APPLICANT:
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                                   APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Rank, David R.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David R.
TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
FILE REFERENCE: ADOMICA-X-2
CURRENT APPLICATION NUMBER: US/10/029,386
CURRENT FILING DATE: 2001-12-20
NUMBER OF SEQ ID NOS: 34288
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
LENGIN: Annomax Sequence Listing Engine vers. 1.1
LENGIN: 63
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Publication No. US20040031072A1
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Delates and Uses Thereof for Plant Improvement
TITLE OF INVENTION: 2003-04-28
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT PLING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 152702
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ORGANISM: Homo sapiens
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.8
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.8
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 4.5
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 1.7
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.7
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.7
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.9
OTHER INFORMATION: SYPERSSED IN HARDENTA, SIGNAL = 1.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25.0%; Score 5; DB 14; Length 63
100.0%; Pred. No. 2.9e+02;
tive 0; Mismatches 0; Indels
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US-10-424-599-152702
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100.0%; Pred. No. 3e+
tive 0; Mismatches
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Publication No. US20040031072A1
GENERAL INFORMATION:
Publication No. US20030194704A1
GENERAL INFORMATION:
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Best Local Similarity 100.v.
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nes 5; Conservative
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APPLICANT: Recipon, Reverse
APPLICANT: Recipon, Herve
APPLICANT: Cafferkey, Robert
APPLICANT: Cafferkey, Robert
APPLICANT: Ali, Shujath
APPLICANT: Ali, Chenghua
TITLE OF INVENTION: Compositions and Methods Relating to Prostate Specific Genes and
TITLE OF INVENTION: Compositions and Methods Relating to Prostate Specific Genes and
TITLE OF INVENTION UNMER: US/10/001,879
CURRENT FILING DATE: 2001-11-20
PRIOR APPLICATION NUMBER: 60/252,188
PRIOR FILING DATE: 2000-11-21
NUMBER OF SEQ ID NOS: 201
NUMBER OF SEQ ID NOS: 201
SOFTWARE: PatentIn version 3.1
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NY: EXPRESSED IN PLACENTA, SIGNAL = 1.2

NY: EXPRESSED IN DUNG, SIGNAL = 3.1

NY: EXPRESSED IN ADULT LIVER, SIGNAL = 1.8

NY: EXPRESSED IN HALLO, SIGNAL = 1.8

NY: EXPRESSED IN HELLO, SIGNAL = 1.8

NY: EXPRESSED IN HELLO, SIGNAL = 1.8

NY: EXPRESSED IN HELLA, SIGNAL = 1.5

NY: EXPRESSED IN HELA, SIGNAL = 1.5

NY: EXPRESSED IN HELA, SIGNAL = 1.1

NY: EXPRESSED IN HEARY, SIGNAL = 1.1

NY: EXPRESSED IN HEARY; SIGNAL = 1.1

NY: EXPRESSED IN HEARY; SIGNAL = 1.1

NY: EXT HUMAN HIT: BE314635.1, EVALUE 5.00e-09

NY: EST_HUMAN HIT: AU139120.1, EVALUE 1.00e-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25.0%; Score 5; DB 9; Length 72;
100.0%; Pred. No. 3.3e+02;
rative 0; Mismatches 0; Indels
                                  NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 34034
LENGTH: 72
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence 175, Application US/10001879; Publication No. US20020127237A1; GENERAL INFORMATION:
PRIOR FILING DATE: 2001-01-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Salceda, Susana
APPLICANT: Macina, Roberto
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Best Local Similarity 100.
Matches 5; Conservative
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                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapien
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OTHER INFORMATION: E
OTHER INFORMATION: E
OTHER INFORMATION: E
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Best Local Similarity
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US-10-437-963-102863
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LENGIH: 72
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APPLICANT: Rank, David R.
APPLICANT: Hansel, David K.
APPLICANT: Honshell K.
APPLICANT: HANSHOR EDRIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
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Pred. No. 3.1e+02;
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US-10-424-599-150750
                                                                                                                                                                                                                                                                                                                                            LOCATION: (1)..(68)
OTHER INFORMATION: unsure at all Xaa locations
FEATURE:
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100.0%; Pred. No. ...
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CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT PELLING DATE: 2001-05-23
PRIOR PELLING DATE: 2001-05-23
PRIOR PELLING DATE: 2000-05-04
PRIOR PLLING DATE: 2000-05-04
PRIOR APPLICATION NUMBER: US 69/632,366
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR PLLING DATE: 2000-06-05
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR PLLING DATE: 2000-10-0
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR PLLING DATE: 2001-01-30
PRIOR PLLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR PLLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR PLLING DATE: 2001-01-30
PRIOR PLLING DATE: 2001-01-30
PRIOR PLLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR APPLICATION NUMBER: US 99/608,408
   CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SRQ ID NOS: 285684
LENGTH: 68
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Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
Matches 5; Conservative
                                                                                                                                                                                                    TYPE: PRT ORGANISM: Glycine max
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US-09-864-761-34034
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APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INTENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
FILE REFERENCE: 38-21 (53223) B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
LENGTH: 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Solu Vihua
APPLICANT: Shou Vihua
APPLICANT: Can Vongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERRNCE: 38-21(53223)B
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 149863
LENGTH: 79
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APPLICANT: Barney, Shawn
APPLICANT: Barney, Shawn
APPLICANT: Thomas, Mary Beth
APPLICANT: Thomas, Mary Beth
APPLICANT: Puranam, Kasturi
APPLICANT: Ratz, Lawrence C.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING
TITLE OF INVENTION: AND TREATING CONDITIONS, DISORDERS, OR DISEASES INVOLVING
FILE REFERENCE: 10001-005-999
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                                                                                                                                                                                                                                                                           OTHER INFORMATION: Clone ID: PAT_MRT3847_101228C.1.pep
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US-10-424-599-149863
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Publication No. US20040031072A1
GENERAL INFORMATION:
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Patent No. US20020111471A1
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APPLICANT: COGENT NEUROSCIENCE,
APPLICANT: Lo, Donald C.
                                                                                                                                                                                                                                                                                                                                                                                 5; Conservative
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Best Local Similarity 100.4
Matches 5, Conservative
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ORGANISM: Glycine max
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Sequence 135152, Application US/10437963

Publication No. US20040123343A1

GENERAL INFORMATION:

APPLICANT: La Rosa, Thomas J.

APPLICANT: Cao, Vinua

APPLICANT: Cao, Vinua

APPLICANT: Boukharov, Andrey A.

APPLICANT: Buckharov, Andrey A.

APPLICANT: Bring Barday A.

APPLICANT: Li, Ping

TITLE OF INVENTION: Place Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Place and Uses Thereof for Plant Improvement

CURRENT APPLICATION NUMBER: US/10/437,963

CURRENT APLICATION NUMBER: US/10/437,963

SEQ ID NO 135152

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US-10-437-963-102863
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US-10-437-963-135152
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100.0%; Pred. No. 3.5e+02;
tive 0; Mismatches 0;
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GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
Kovalic, David K.
Zhou, Yihua
Cao, Yongwei
Wu, Wei
Boukharov, Andrey A.
Barbazuk, Brad
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Matches 5; Conservative
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ORGANISM: Oryza sativa
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                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 5; Conserv
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US-10-424-599-144203
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TITLE OF INVENTION: Colon and Colon Cancer Associated Polynucleotides and Polypeptide FILE PEPLICANT: Ruben et al.

TITLE OF INVENTION: Colon and Colon Cancer Associated Polynucleotides and Polypeptide FILE REFERENCE: PAGE 1010/106,698
CURRENT PELING DATE: 2002-03-27
PRIOR APPLICATION NUMBER: PCT/US00/26524
PRIOR APPLICATION NUMBER: US 60/157,137
PRIOR PILING DATE: 1999-09-29
PRIOR FILING DATE: 1999-09-29
REIOR APPLICATION NUMBER: US 60/163,280
PRIOR FILING DATE: 1999-11-03
NUMBER OF SEQ ID NOS: 8564
SOPTWARE: Patentin Ver. 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE CAO YONGWei
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT PILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 240184
LENGTH: 83
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                                                                                                                                                                                                                                         25.0%; Score 5; DB 16; Length 80; 100.0%; Pred. No. 3.5e+02; rative. 0; Mismatches 0; Indels
                                                                                                                                                                            OTHER INFORMATION: Clone ID: PAT_MRT4530_102638C.1.pep
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US-10-424-599-240184
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CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 105389
LENGTH: 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 240184, Application US/10424599; Publication No. US20040031072A1; GENERAL INFORMATION:
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Sequence 7816, Application US/10106698

Publication No. US20030109690A1

GENERAL INFORMATION:
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Best Local Similarity 100...
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Matches 5; Conservative
                                                                                                                                     ORGANISM: Oryza sativa
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LENGTH: 84
TYPE: PRT
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                                                                                                                 TYPE: PRT
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US-10-424-599-161301
US-10-424-599-161301
Sequence 161301, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: David K
TITLE OF INVENTION: David K
TITLE OF INVENTION: David K
TITLE OF INVENTION: La 8.02 1(53223) B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
SEQ ID NOS: 285684
ELENGTH: 80
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TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53221)B
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                                                                                                                                                                                                                                                                         Length 80;
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OTHER INFORMATION: unsure at all Xaa locations
PEATURE:
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100.0%; Pred. No. ...
0; Mismatches
         CURRENT APPLICATION NUMBER: US/09/922,261
CURRENT FILING DATE: 2001-08-03
PRIOR APPLICATION NUMBER: US/09/461,697
PRIOR FILING DATE: 1999-12-14
NUMBER OF SEQ ID NOS: 466
SOFTWARE: FASLSEQ for Windows Version 4.0
SEQ ID NO 464
LENGTH: 80
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Publication No. US20040123343A1
GENERAL INFORMATION:
APPLICANT: La Rosa, Thomas J.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
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Boukharov, Andrey A.
Barbazuk, Brad
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Best Local Similarity 100.
Matches 5; Conservative
                                                                                                                                                                                         TYPE: PRT
CRGANISM: Homo sapiens
US-09-922-261-464
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APPLICANT:
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APPLICANT:
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ORGANISM: Homo sapiens

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TITE OF INVENTION: Li, Ping
TITE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21 (53221) B
CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 183176
LENGTH: 85
TYPE: ...
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APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
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100.0%; Pred. No. 3.7
tive 0; Mismatches
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CURRENT APPLICATION NUMBER: US/09/864,761

CURRENT FILING DATE: 2001-05-23

PRIOR PELING DATE: 2001-05-24

PRIOR PILING DATE: 2000-02-04

PRIOR PELING DATE: 2000-05-26

PRIOR PLING DATE: 2000-05-26

PRIOR PLING DATE: 2000-06-26

PRIOR PLING DATE: 2000-06-26

PRIOR APPLICATION NUMBER: US 60/236,366

PRIOR PLING DATE: 2000-09-03

PRIOR APPLICATION NUMBER: US 60/236,359

PRIOR PLING DATE: 2000-09-27

PRIOR APPLICATION NUMBER: PCT/USO1/00666

PRIOR PLING DATE: 2001-01-30

PRIOR PLING DATE: 2001-01-30
                                                                                                                        Sequence 183176, Application US/10437963
Publication No. US20040123343A1
GENERAL INFORMATION:
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FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 47995, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
                                                                                                                                                                                         APPLICANT: La Rosa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Wu, Wei
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Best Local Similarity 100..
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ORGANISM: Oryza sativa
38 PRGAP 42
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                                                                                                 US-10-437-963-183176
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APPLICANT: Leach, Martin D.
APPLICANT: Leach, Martin D.
APPLICANT: Mehraban, Fuad,
APPLICANT: Mehraban, Fuad,
APPLICANT: Conley, Pamela
APPLICANT: Conley, Pamela
APPLICANT: Law, Debbie
APPLICANT: Topper, James
TITLE OF INVENTION: No. US20020082206A1el Polymucleotides from Atherogenic Cells and
TITLE OF INVENTION: Thereby
TITLE OF INVENTION: Thereby
TITLE OF INVENTION: Thereby
CURRENT APPLICATION NUMBER: US/09/867,550
CURRENT APPLICATION NUMBER: US/09/867,550
PRIOR FILING DATE: 2001-09-20
PRIOR FILING DATE: 2000-05-30
NUMBER OF SEQ ID NOS: 2125
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 772
LENGTH: 85
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                                   LOCATION: (2)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: MISC_FEATURE
                                                                                                                                                                                                                                                  LOCATION: (39)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KRY: MISC_FEATURE
LOCATION: (41)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
LOCATION: (43)
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OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: MISC_FEATURE
LOCATION: (77)

OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: MISC_FEATURE
                                                                                                    LOCATION: (14) — COCATION: Kaa equals any of the naturally occurring L-amino acids NAME/KEY: MISC_FRATURE
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Best Local Similarity 100...
5, Conservative
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Matches 5; Conservative
                 NAME/KEY: MISC_FEATURE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6 PRGAP 10
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1 PRGAP 5

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| GENERAL INFORMATION: USZUGUTLESS#3AL GENERALION NO. USZUGUTLESS#3AL GENERALION NO. USZUGUTLESS#3AL GENERALION: GENERALION: The Rosa; Thomas J. APPLICANT: La Rosa; Thou, Yihua | APPLICANT: Cao, Vongwei | APPLICANT: Wu, Wei | APPLICANT: Barbazuk, Brad | APPLICANT: Barbazuk, Brad | APPLICANT: Barbazuk, Brad | APPLICANT: Barbazuk, Brad | APPLICANT: Li, Ping | TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With | TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement | FILE REFERENCE: 38-21(53221) B | CURRENT APPLICATION NUMBER: US/10/437,963 | CURRENT FILING DATE: 2003-05-14 | NUMBER OF SEQ ID NOS: 204966 | SEQ ID NO 102687 | LENGTH: 88 | LENGTH: 88
                                                                                                                         APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
APPLICANT: Zoo Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: 2011632338
CURRENT APPLICATION NUMBER: 2003-04-28
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 281783
LENGTH: 87
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US-10-437-963-102687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Clone ID: PAT_MRT3847_96470C.1.pep
US-10-424-599-281783
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100.0%; Pred. No. 3.8e+02;
tive 0; Mismatches 0;
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; Publication No. US20040172684A1
; GENERAL INFORMATION:
                        US-10-424-599-281783
; Sequence 281783, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
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Best Local Similarity 100..
L.c 5; Conservative
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Matches 5; Conservative
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ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Glycine max
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US-10-42-599-180086, Application US/10424599

Publication No. US20040031072A1

GENERAL INFORMATION:

APPLICANT: La Rosa Thomas J

APPLICANT: Avalic David K

APPLICANT: APPLICANT: Acvalic David K

APPLICANT: APPLICANT: Acvalic David K

APPLICANT: Application Wina

APPLICANT: Cao Yongwei

TITLE OF INVENTION: 99 Nucleic Acid Molecules and Other Molecules Associated With

FILE REPERBNCE: 38-21(5323) B

CURRENT APPLICATION NUMBER: US/10/424,599

CURRENT APPLICATION NUMBER: US/10/424,599

CURRENT PILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 285684

SEQ ID NO 180086

LENGTH: 87
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OTHER INFORMATION: EXPRESSED IN HBL100, SIGNAL = 0.66
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.68
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.94
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.67
OTHER INFORMATION: EXTLUMAN HIT: BE888511.1, EVALUE 1.00e-10
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US-10-424-599-180086
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00668
PRIOR APLICATION NUMBER: PCT/USO1/00663
PRIOR APLICATION NUMBER: PCT/USO1/00662
PRIOR APPLICATION NUMBER: PCT/USO1/00662
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00661
PRIOR APPLICATION NUMBER: PCT/USO1/00670
PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR PILING DATE: 2000-09-21
PRIOR PILING DATE: 2000-06-30
PRIOR FILING DATE: 2000-06-30
PRIOR FILING DATE: 2000-06-30
PRIOR PILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR PILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 09/774,203
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Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity
Matches 5; Conserv
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APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53221)B
CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 124347
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US-10-437-963-115372
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US-10-437-963-124347
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Publication No. US20040123343A1
GENERAL INFORMATION:
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Publication No. US20040031072A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: La Rosa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: Cao, Yihua
APPLICANT: Wu, Wei
APPLICANT: Wu, Wei
APPLICANT: Barbarov, Andrey A.
APPLICANT: Barbarok, Brad
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Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity 100...
5, Conservative
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APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Oryza sativa
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APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Wai
APPLICANT: Boukharov, Andrey A. APPLICANT: Boukharov, Andrey A. APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE REFERENCE: 38-21(53221)B
CURRENT APPLICATION NUMBER: US/10/437,963
UNMBER OF SEQ ID NOS: 204966
SEQ ID NO S: 204966
LENGTH: 89
                                                                                                               APPLICANT: Kovalic, David K.

APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongue
APPLICANT: Cao, Yongue
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof For Plant Improvement
TITLE OF INVENTION: WIMBER: US/10/767,701
CURRENT APPLICATION NUMBER: US/10/767,701
CURRENT FILING DATE: 2004-01-29
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US-10-767-701-50033
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US-10-437-963-127248
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100.0%; Pred. No. 3.9.
iive 0; Mismatches
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APPLICANT: Kovalic, David K.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Wei Wei
APPLICANT: Boukharov, Andrey A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 127248, Application US/10437963; Publication No. US20040123343A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Sorghum bicolor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5; Conservative
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US-10-437-963-115372
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LENGTH: 88
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APPLICANT: Kovalic, David K.
APPLICANT: Kovalic, David K.
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof For Plant Improvement
FILE REFERENCE: 38-21(53535)B
CURRENT APPLICATION NUMBER: US/10/767,701
CURRENT FILING DATE: 2004-01-29
NUMBER OF SEQ ID NOS: 63128
SEQ ID NO 47642
LENGTH: 95
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US-09-905-243-15
US-09-905-243-15
Sequence 15, Application US/09905243
Fatent No. US2002006200941
GENERAL INFORMATION:
APPLICANT: Taylor, Alexander H
TITLE OF INVENTION: Monoclonal Antibodies with Reduced
TITLE OF INVENTION: Immunogenicity
FILE REFERENCE: PSO/TON Immunogenicity
CURRENT APPLICATION NUMBER: US/09/905,243
CURRENT FILING DATE: 2001-07-16
FRIOR FILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 97
SEQ ID NO 15
LENGTH: 96
LENGTH: 96
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US-10-767-701-47642
                                                                                                   OTHER INFORMATION: Clone ID: PAT_MRT4530_53477C.1.pep
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100.0%; Pred. No. 4.1e+02;
tive 0; Mismatches 0;
                                                                                                                                                                       DB 16; Le
. 4.1e+02;
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                                                                                                                                                                     25.0%; Score 5; DB 1
100.0%; Pred. No. 4.1
tive 0; Mismatches
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; Publication No. US20040172684A1
; GENERAL INFORMATION:
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Best Local Similarity 100.
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ORGANISM: Pan troglodytes
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ORGANISM: Sorghum bicolor
                                           TYPE: PRT
ORGANISM: Oryza sativa
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Best Local Similarity
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SEQ ID NO 153530
LENGTH: 95
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; Sequence 15330, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
APPLICANT: Cao, Yongwei
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Wu, Wei
; APPLICANT: Wu, Wei
; APPLICANT: Buxharow, Andrey A.
APPLICANT: Buxharow, Brad
APPLICANT: Li, Paring
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; TITLE OF INVENTION NUMBER: US/10/437,963
; CURRENT PILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-864-408A-7168
Sequence 7168, Application US/09864408A
Sequence 7168, Application US/09864408A
Sequence 7168, Application US/09864408A
Sequence 7168, Application US/09474A1
Seneration No. US20040009474A1
Seneration No. US20040009474A1e1 Human Polynucleotides and Polypeptides Encorn Shimkets, Richard A.
TITLE OF INVENTION: NO. US20040009474A1e1 Human Polynucleotides and Polypeptides Encorn FILE REFERENCE: 21402-012
CURRENT APPLICATION NUMBER: US/09/864,408A
PRIOR APPLICATION NUMBER: 60/206,690
PRIOR PILING DATE: 2000-05-24
NUMBER OF SEQ ID NOS: 9068
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 7168
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                                                                                                                                                                                                                                                                                           0; Indels
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US-10-424-599-217028
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                                                                                                                                                                                                                                                Score 5; DB 15;
Pred. No. 4e+02;
                                                                                                                                                                                                                                     25.0%; Scott 100.0%; Pred. No. action 0; Mismatches
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    CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
LENGTH: 93
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Matches 5; Conservative
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ORGANISM: Homo sapiens
                                                                                                                      TYPE: PRT ORGANISM: Glycine max
                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                 FEATURE:
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APPLICANT: LA ROSA, Thomas J.
APPLICANT: LA ROSA, Thomas J.
APPLICANT: La Rosa, Thomas J.
APPLICANT: Sou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Boukharov, Andrey A.
APPLICANT: Buckharov, Andrey A.
APPLICANT: Brown Barbazuk, Brad
APPLICANT: Li, Ping
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5321)B
CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 134702
LENGTH: 97
                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
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                                                             25.0%; Score 5; DB 16; Length 96; 100.0%; Pred. No. 4.1e+02; cive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Clone ID: PAT_MRT3847_114899C.1.pep
US-10-424-599-159333
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US-10-437-963-134702
                                                                                                                                                                                                                                                                                                                       Sequence 159333, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
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Publication No. US20040123343A1
                                                                                Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity 100.
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Glycine max
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                                                                                                                                                                                                      60 PRGAP 64
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US-10-424-599-159333
                 US-10-437-963-157410
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LENGTH: 97
                                                               Query Match
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Fublication No. US2040123343A1
GENERAL INFORMATION:
Publication No. US2040123343A1
GENERAL INFORMATION:
PublicANT: La Rosa, Thomas J.
APPLICANT: Cao, Yongwei
APPLICANT: Cao, Yongwei
APPLICANT: Boukharov, Andrey A.
APPLICANT: Boukharov, Andrey A.
APPLICANT: Buckharov, Andrey A.
APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF EVERTICATION WUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
CURRENT FILING DATE: 2003-05-14
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 142846, Application US/10424599
Sequence 142846, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Cao Yongwei
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REPERENCE: 32-1(5223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
LENGTH: 96
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                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                         25.0%; Score 5; DB 9; Length 96; 100.0%; Pred. No. 4.1e+02;
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US-10-424-599-142846
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OTHER INFORMATION: Clone ID: PAT_MRT4530_56985C.1.pep
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Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity 100.
Matches 5; Conservative
                                                                         COCATION: (50) ...(66)
CTHER INFORMATION: CDRII
US-09-905-243-15
LOCATION: (31)...(35)
OTHER INFORMATION: CDRI
NAME/KEY: DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Glycine max
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LENGTH: 96
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APPLICANT: Cao, Yongwei
APPLICANT: Wu, Wei
APPLICANT: Wu, Wei
APPLICANT: Wu, Wei
APPLICANT: Wu, Wei
APPLICANT: Barbazuk, Brad
APPLICANT: Barbazuk, Brad
APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REPERRORS: 38-21(53221)B
CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 104856
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US-10-437-963-104856
                                                                                              TITLE OF INVENTION: 143 Human Secreted Proteins
FILLE REPERENCE: PS5001
CURRENT APPLICATION NUMBER: US/09/986,480
CURRENT FILING DATE: 2001-11-08
FRIOR APPLICATION NUMBER: US/09/986,480
PRIOR FILING DATE: 2000-05-11
PRIOR PELING DATE: 1999-05-13
NUMBER OF SEQ ID NOS: 456
SOFTWARE: PALENTIN Ver. 2.0
SEQ ID NO 303
LUNG BENTING DATE: 1000-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25.0%; Score 5; DB 10; Le
100.0%; Pred. No. 4.2e+02;
vative 0; Mismatches 0;
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; Publication No. US20040031072A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence 104856, Application US/10437963; Publication No. US20040123343A1
                             Sequence 303, Application US/09986480 Publication No. US20030027999A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: La Rosa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Wu, Wei
APPLICANT: Boukharov, Andrey A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
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ORGANISM: Oryza sativa
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, ORGANISM: Homo sapiens
US-09-986-480-303
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Best Local Similarity
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US-10-424-599-267655
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             US-09-986-480-303
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Publication No. US20040031072A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: La Nou Yibua
APPLICANT: APPLICANT: Ano Yibua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT FILING DATE: 2003-04-28

CURRENT FILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 285684

SEQ ID NO 155904
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US-10-424-599-155904
                                                                                                                                                                                                                                                          APPLICANT: ISHLEWA, JUN
APPLICANT: HORIKAWA, HIROSHI
APPLICANT: SHIBA, TADAYOSHI
APPLICANT: SHEBA, TADAYOSHI
APPLICANT: SAKAKI, YOSHIYUKI
APPLICANT: HATTORI, WASAHIRA
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
TITLE REPERRNCE: 249-262
CURRENT FILLIGN DATE: 2002-05-29
PRIOR APPLICATION NUMBER: UP 2001-204089
PRIOR PILING DATE: 2001-05-30
PRIOR PILING DATE: 2001-05-30
PRIOR PILING DATE: 2001-08-02
PRIOR PILING DATE: 2001-08-02
SEQ ID NO 8165
                                                                                                                                US-10-156-761-8165
Sequence 8165, Application US/10156761
; Publication No. US20030119018A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT ORGANISM: Streptomyces avermitilis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT ORGANISM: Glycine max
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Best Local Similarity
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Matches 5; Conserv
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US-10-424-599-155904
PRGAP
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APPLICANT: Cao, Yongwei
APPLICANT: Wu, Wei
APPLICANT: Wu, Wei
APPLICANT: Buchkarov, Andrey A.
APPLICANT: Buchkarov, Andrey A.
APPLICANT: Barbazuk, Brad
APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERRANCE: 38-21(53221)B
CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 185681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: La Rosa, Thomas J.
APPLICANT: Exvalic, David K.
APPLICANT: Evou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Gao, Yongwei
APPLICANT: Wu, Wei
APPLICANT: Boukharov, Andrey A.
APPLICANT: Barbazuk, Brad
APPLICANT: Barbazuk, Brad
APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53221) B
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US-10-437-963-185681
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; OTHER INFORMATION: Clone ID: PAT_MRT4530_84537C.1.pep
US-10-437-963-187877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25.0%; Score 5; DB 16; Le
100.0%; Pred. No. 4.3e+02;
tive 0; Mismatches 0;
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CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 187877
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Publication No. US20040123343A1
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; Sequence 195845, Application US/10437963
; Publication No. US20040123343A1
       Publication No. US20040123343A1 GENERAL INFORMATION:
                                                 APPLICANT: La Rosa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Wu, Wei
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Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Oryza sativa
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Best Local Similarity
Matches 5; Conserv
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                                                                          TITLE OF INVENTION: Soy functeic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Soy functeic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement FILE REPRENCE: 38-21(5323)B

CURRENT FILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 285684

SEQ ID NO 267655

LENGTH: 101
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: (3) - OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids US-10-264-237-1456
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Publication No. US20040009491A1

GENERAL INFORMATION:

APPLICANT: Birse et al.

TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies

FILE REPERBENCE:

CURRENT APPLICATION NUMBER: US/10/264,237

CURRENT FILING DATE: 2002-10-04

PRIOR FILING DATE: 2001-05-18

PRIOR FILING DATE: 2001-05-18

PRIOR FILING DATE: 2000-05-19

NUMBER OF SEQ ID NOS: 2876

SOFTWARE: Patentin Ver: 3.1

SEQ ID NO 1456
                                                                                                                                                                                                                                                                                                                                                                                                                              25.0%; Score 5; DB 15; Length 101; 100.0%; Pred. No. 4.3e+02; Live 0; Mismatches 0; Indels
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APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity 100.
Matches 5; Conservative
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ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                       ORGANISM: Glycine max
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US-10-437-963-185681
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APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Can Voluid
APPLICANT: Can Voluid
APPLICANT: Can Yongwei
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT APPLICATION NUMBER: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 216376
                                                                                                                                                        APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: ABOUT SA12) B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT APPLICATION NUMBER: US/203-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 46232
LENGTH: 104
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OTHER INFORMATION: unsure at all Xaa locations
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US-10-425-114-46232
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Publication No. US20040123343A1
GENERAL INFORMATION:
APPLICANT: La Rosa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 216376, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
                                                                     Kovalic, David K.
Screen, Steven E
Tabaska, Jack E
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Best Local Similarity 10v..
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Best Local Similarity 100.
                                       Zhou, Yihua
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT ORGANISM: Glycine max
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US-10-437-963-126718
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                                                                         APPLICANT:
APPLICANT:
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GENERAL INFORMATION:

APPLICANT: La Rosa, Thomas J.

APPLICANT: La Rosa, Thomas J.

APPLICANT: Avoalic, David K.

APPLICANT: Zhou, Yihua

APPLICANT: Cao, Yongwei

APPLICANT: Boukharov, Andrey A.

APPLICANT: Buckharov, Andrey A.

APPLICANT: Buckharov, Andrey A.

APPLICANT: Buckharov, Andrey A.

APPLICANT: Li, Ping

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

TITLE OF INVENTION: DASSER: US/10/437,963

CURRENT FILING DATE: 2003-05-14

NUMBER OF SEQ ID NOS: 204966

SEQ ID NO 195845

LENGTH: 103

PEATURE:

NAME/KEY: unsure

PEATURE:

OCHER INFORMATION: unsure at all Xaa locations

PEATURE:

OCHER INFORMATION: unsure at all Xaa locations

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Sequence 60687, Application US/10767701

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: ROOM IN TILLE OF INVENTION: Plants and Uses Thereof For Plant Improvement
TITLE OF INVENTION: Plants and Uses Thereof For Plant Improvement
FILE REFERENCE: 38-21(53535)8
CURRENT APPLICATION NUMBER: US/10/767,701
NUMBER OF SEQ ID NOS: 63128
SEQ ID NO 60687
ILENGTH: 103
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Best Local Similarity 100.0%; Pred. No. 4.3e+02;
Matches 5; Conservative 0; Mismatches 0; Indels
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US-10-437-963-195845
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US-10-767-701-60687
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US-10-425-114-46232
Sequence 46232, Application US/10425114
Publication No. US20040034888A1
GENERAL INFORMATION:
APPLICANT: Liu, Jingdong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
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ORGANISM: Sorghum bicolor
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US-10-767-701-60687
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APPLICANT: Wu, Wei
APPLICANT: Boukharov, Andrey A.
APPLICANT: Barbaruk, Brad
APPLICANT: Barbaruk, Brad
APPLICANT: Li, Pinds
APPLICANT: Li, Pinds
APPLICANT: Li, Pinds
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: 2003-05-19
CURRENT APPLICATION NUMBER: US/10/437,963
UNRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 126718
LENGTH: 105
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US-10-437-963-126718
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Fubblication No. US20040010134A1
GRENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REPRENCE: PF546PCT
CURRENT APPLICATION NUMBER: US/09/833,245
CURRENT APPLICATION NUMBER: 60/229, 358
PRIOR APPLICATION NUMBER: 60/229, 358
PRIOR FILING DATE: 2000-04-12
PRIOR FILING DATE: 2000-04-12
PRIOR APPLICATION NUMBER: 60/199, 384
PRIOR FILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 2267
SOFTWARE: PALENTH VET: 2.1
SEQ ID NO 280
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Best Local Similarity 100.0
Matches 5; Conservative
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ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-833-245-280
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US-09-270-767-60336
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US-09-252-991A-23304
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US-09-252-991A-2375
US-09-252-991A-21547
US-09-252-991A-21547
US-09-252-991A-21547
US-08-31-2-38'B-8
US-08-683-426-8
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US-09-252-991A-29502
US-09-252-991A-24711
US-09-616-289-43
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   Sequence 34, Appl
Sequence 15, Appl
Sequence 15, Appl
Sequence 6, Appli
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4651, Ap
4651, Ap
4644, Ap
265129, A
4644, Ap
38667, A
38667, A
3867, A
30594, A
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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'cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
'cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
'cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
'cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
'cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
'cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
'cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
            GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
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US-07-972-032-15

US-08-1242-255-15

US-09-134-001C-4851

US-09-134-001C-4851

US-09-134-001C-4851

US-09-270-767-52129

US-09-270-767-52129

US-09-270-767-38667

US-09-270-767-3884

US-09-270-767-3886

US-09-270-767-3968

US-09-124-671-21

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US-09-124-671-21

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US-09-270-767-39768

US-09-270-767-39768
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                                                                             - protein search, using sw model
                                                                                                           October 26, 2004, 07:06:01
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20
1 PRGAPMWMRWVCQM
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Perfect :
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No.
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19219, A 19369, A 198816, A 46634, A 20554, A 311339, A 23047, A 26114, A 30428, A

Sequence Sequence Sequence Sequence Sequence

30428, A 5815, Ap 2, Appli

Sequence Sequence Sequence

Sequence Sequence S

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Sequence Sequence

Sequence

19054, A 27023, A 25619, A 32407, A 21361, A 9, Appli

Sequence Sequence S

Sequence 1 Sequence 2 Sequence 2 Sequence 3

Sequence 23505, A Sequence 18255, A Sequence 27602, A Sequence 4242, Ap

438, Ā Appli

4242, P 25438,

Sequence Seguence Sequence Sequence

Appl

6892, Ap 29502, A 24711, A

Sequence Sequence

43, Appl

Sequence Sequence Sequence

140, Ap 17429,

11, Appl 58, Appl 31532, A

Sequence Sequence Sequence

Sequence Sequence

Appli , Appl 24, Ap

Sequence Sequence

4824, A

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Sequence Sequence

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RESULT 3
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Patent No. 6482937
GENERAL INFORMATION:
APPLICANT: Baetscher, Manfred W.
APPLICANT: AAIyoshi, Donna E.
APPLICANT: Kaplan, Ruth A.
TITLE OF INVENTION: Cells and Pigs for Use in Said Method, Transgenic Pigs FILE REFERENCE: 61750-309
CURRENT APPLICATION NUMBER: US/08/948,113D
CURRENT FILING DATE: 1997-10-09
SOFTWARE: Patentin Ver. 2.1
SSEQ ID NO. 34
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Patent No. 5496712
GENERAL INFORMATION:
APPLICANT: Cappello, Joseph
APPLICANT: Ferrari, Franco A.
TITLE OF INVENTION: HIGH MOLECULAR WEIGHT COLLAGEN-LIKE
TITLE OF INVENTION: PROTEIN POLYMERS
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bettram I. Rowland
STREET: 4 Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
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STRATE: California
COUNTRY: USA
ZIP: CA 94111
COMPUTER READABLE FORM:
MEDIUM TYPE: IDAPY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRIT APPLICATION DATA:
APPLICATION NUMBER: US/07/972,032
FILING DATE: 19921105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Rowland, Bertram I.
REGISTRATION NUMBER: 20,015
REPERENCE/DOCKET NUMBER: A-55556-1/BIR;PROP-08-1
TELECHOUNICATION INFORMATION:
TELEPHONE: (415) 781-1989
INFORMATION FOR SEQ ID NO: 15: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30.0%; Score 6; DB 4;
100.0%; Pred. No. 21;
iive 0; Mismatches
ALIGNMENTS
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/791,960
FILING DATE: 12-NOV-1991
ATTORNEY/AGENT INFORMATION:
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Best Local Similarity 100.
Matches 6; Conservative
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ORGANISM: Mus sp.
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US-08-948-113D-34
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US-07-972-032-15
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APPLICANT: CAPPELLO, JOSEPH
APPLICANT: CAPPELLO, JOSEPH
APPLICANT: CAPPELLO, JOSEPH
APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
CORRESPONDENCE ADDRESS:
ADDRESSEE: FLERK, HOHBACH, TEST, ALBRITTON & HERBERT
STREET: ABLARCAGETO Center, Suite 3400
CITY: San Francisco
STREET: California
COUNTRY: USA
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
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. 3.8e+05;
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PELING DATE:
CLIASIFICATION: 435
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: ROWLAND, Bertram I.
REGISTRAILON NUMBER: 20,015
REFERENCE/DOCKET NUMBER: A55556-3/BIR
FELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1494-8771
TELEPHONE: (415) 494-8771
TELEFAX: -, 277299 FHT UR
                                                                                                                                                                                                              25.0%; Score 5; DB 1
100.0%; Pred. No. 3.8
ative 0; Mismatches
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APPLICATION NUMBER: US/08/642,255
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US-09-124-671-6
; Sequence 6, Application US/09124671A
; Patent No. 6160088
; GENERAL INFORMATION:
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100.0%; Pre
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INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
                                                                                                                                                                                                                      Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
; LENGTH: 9 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-07-972-032-15
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Best Local Similarity
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Patent No. 6703491
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270, 767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
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US-09-270-767-52129

Sequence 52129, Application US/09270767

Sequence 52129, Application US/09270767

Sequence 52129, Application US/09270767

FRIED REPERENCE: FILE Reference: 7326-094

CURRENT APPLICATION NUMBER: US/09/270, 767

CURRENT FILING DATE: 1999-03-17

NUMBER OF SEQ ID NOS: 62517

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 52129

LENGTH: 77
                                                                                                           Gaps
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                                                                  Length 74;
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                                                                DB 3;
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100.0%; Pred. No. 87;
ative 0; Mismatches
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100.0%; Pred. No. 87;
tive 0; Mismatches
                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Xaa means any amino acid US-09-270-767-36912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Xaa means any amino acid US-09-270-767-52129
                                                                Score 5; |
Pred. No.
    ; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-4851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 464, Application US/09461697
                                                 25.0%; Scor.
100.0%; Pre
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                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5; Conservative
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                                          Query Match
Best Local Similarity
'-hng 5; Conserv?
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Best Local Similarity
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Best Local Similarity
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LENGTH: 77
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US-09-461-697-464
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APPLICANT: LYND DOUGETEE-Stamm et al
APPLICANT: LYND DOUGETEE-STAMM et al
APPLICANT: LYND DOUGETEE-STAMM AMINO ACID SEQUENCES RELATING TO STAPHYLOCCOCCUS
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCCOCCUS
TITLE OF INVENTION: BUIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
TITLE REPERENCE: GTC-007
CURRENT APPLICATION NUMBER: US/09/134,001C
CURRENT FILING DATE: 1996-08-13
PRIOR FILING DATE: 1997-11-08
PRIOR FILING DATE: 1997-11-08
PRIOR FILING DATE: 1997-01-08-14
SEQ ID NO 3074
SEQ ID NO 3074
LENGTH: 74
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                 APPLICANT: Hoe, Mee
TITLE OF INVENTION: KDEL RECEPTOR INHIBITORS
FILE REPERBENCE: 31488
CURRENT APPLICATION NUMBER: US/09/124,671A
CURRENT FILING DATE: 1998-07-29
NUMBER OF SEQ ID NOS: 42
SOFTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 6
LENGTH: 46
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100.0%; Pred. No. 85;
iive 0; Mismatches
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100.0%; Pred. No. 58;
iive 0; Mismatches
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; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-3074
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Best Local Similarity 100...
S. Conservative
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ORGANISM: Xenopus laevis
APPLICANT: Mayhew, Mark
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Matches 5; Conserv
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US-09-134-001C-3074
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US-09-134-001C-4851
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Sequence 13486, Application US/09489039A, Sequence 13486, Application US/09489039A, Patent No. 6610836, Batent No. 6610836, The No. 6610836, The Patent INFORMATION:
APPLICANT: GATY Breton et. al APPLICANT: GATY Breton et. al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA, TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERBENCE: 2709, 2004001
CURRENT ELING DATE: 2000-01-27
PRIOR FILING DATE: 1999-01-29
SPIOR FILING DATE: 1999-01-29
SPIOR FILING DATE: 1999-01-29
SEQ ID NO 13486
LENGTH: 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: FILE REGERENCE: 7326-034
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 53884
LENGTH: 91
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100.0%; Pred. No. ...
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; Sequence 53884, Application US/09270767
; Patent No. 6703491
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US-09-270-767-38667
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US-09-489-039A-13486
               SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 38667
LENGTH: 91
TYPE: PRT
NUMBER OF SEQ ID NOS: 62517
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Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
Matches 5; Conserv
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             GENERAL INFORMATION:
APPLICANT: COCENT NEUROSCIENCE, Inc.
APPLICANT: COCENT NEUROSCIENCE, Inc.
APPLICANT: Lo, Donald C.
APPLICANT: Harney, Shawn
APPLICANT: Thomas, Mary Beth
APPLICANT: Portbury, Stuart D.
APPLICANT: Puranam, Kasturi
APPLICANT: Fatz, Lawrence C.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIACNOSING
TITLE OF INVENTION: CELL DEATH
FILLE REPRENCE: 10001-005-999
CURRENT APPLICATION NUMBER: US/09/461,697
CURRENT APPLICATION NUMBER: US/09/461,697
CURRENT BILING DATE: 1999-12-14
NUMBER OF SEQ ID NOS: 466
SEQ ID NO 464
LENGTH. 80
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Batent No. 6703491

GENERAL INFORMATION

APPLICANT: Homburger et al.

TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REFERENCE: File Reference: 7326-094

CURRENT APPLICATION NUMBER: US/09/270,767

CURRENT FILING DATE: 1999-03-17
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CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
FRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
SEQ ID NO 24182
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Pred. No.
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APPLICANT: Marc J. Rubenfield et al.
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100.0%; Pre
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; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-24182
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Best Local Similarity 100.
Matches 5; Conservative
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ORGANISM: Homo sapiens
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Best Local Similarity
Matches 5; Conserv
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US-09-270-767-38667
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Sequence 3054, Application US/09252991A

Sequence 3054, Application US/09252991A

Sequence 3054, Application US/09252991A

Patent No. 6551795

GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS;
TITLE OF INVENTION: NUMBER: US/09/252,991A

CURRENT PILING DATE: 1999-02-18

PRIOR FILING DATE: 1998-02-18

PRIOR PLICATION NUMBER: US 60/074,788

PRIOR PLICATION NUMBER: US 60/094,190

PRIOR APPLICATION NUMBER: US 60/094,190

PRIOR PLING DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 33142

SEQ ID NO 30594
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TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REFERENCE: FILE Reference: 7326-094
CURRENT APPLICATION NUMBER: U5/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 50120
LENGTH: 125
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                                                                                                                                  ; OTHER INFORMATION: Xaa means any amino acid US-09-270-767-34903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-270-767-50120
; Sequence 50120, Application US/09270767
; Patent No. 6703491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT ORGANISM: Drosophila melanogaster
                                TYPE: PRT ORGANISM: Drosophila melanogaster
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Best Local Similarity
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US-09-252-991A-30594
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LENGTH: 125
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Patent No. 6510836

GENERAL INFORMATION

GENERAL INFORMATION

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA

TITLE OF INVENTION: NUCLEIC ACID AND THERAPEUTICS

TITLE OF INVENTION: PREUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS

FILE REPERENCE: 2709.2004001

CURRENT APPLICATION NUMBER: US/09/489,039A

CURRENT PELLING DATE: 1999-01-27

PRIOR FILING DATE: 1999-01-29

NUMBER OF SEQ ID NOS: 14342

LENGTH: 119
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Patent NO. 6703491

GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7226-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 34903
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: chimeric Xenopus laevis TSP4-KDEL
US-09-124-671-21
                                                  Patent No. 6160088;
GRNERAL INFORMATION:
APPLICANT: Rothman, James
APPLICANT: Rothman, James
APPLICANT: Hoe, Mee
TITLE OF INVENTION: KDEL RECEPTOR INHIBITORS
ITILE OF INVENTION: KDEL RECEPTOR INHIBITORS
FILE REFERENCE: 31488
CURRENT APPLICATION NUMBER: US/09/124,671A
CURRENT PILING DATE: 1998-07-29
NUMBER OF SEQ ID NOS: 42
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 21
LENGTH: 109
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US-09-489-039A-11951
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Best Local Similarity 100.8
Matches 5; Conservative
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US-09-489-039A-11951
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   RESULT 14
US-09-124-671-21
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Sequence 8944, Application US/09489039A

Patent No. 6610836

GENERAL INFORMATION

GENERAL INFORMATION

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA

TITLE OF INVENTION: PREUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 2709.20040NA FOR DIAGNOSTICS AND THERAPEUTICS

CURRENT APPLICATION NUMBER: US/09/489,039A

CURRENT FILING DATE: 2000-01-27

PRIOR APPLICATION NUMBER: US 60/117,747

PRIOR FILING DATE: 1999-01-29

NUMBER OF SEQ ID NOS: 14342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INCORMATION:
APPLICANT: LYAIN DOUGELTE-Stamm et al
APPLICANT: LYAIN DOUGELTE-STAMM et al
TITLE OF INVENTION: NUCLEIC ACID AMINO ACID SEQUENCES RELATING TO
TITLE OF INVENTION: ENTERCOCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 032796-032
CURRENT APPLICATION NUMBER: US/09/134,000C
CURRENT FILING DATE: 1998-08-13
RIOR APPLICATION NUMBER: US 60/055,778
PRIOR FILING DATE: 1997-08-15
NUMBER OF SEQ ID NOS: 6812
SOFTWARE: PATENTIN VETSION 3.1
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Pred. No. 1.6e+02;
0; Mismatches 0; Indels
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100.0%; Pred. No. 1.6e+02;
ative 0; Mismatches 0;
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                             60/094,190
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                                                                                                                                                                    , ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-23275
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ORGANISM: Klebsiella pneumoniae
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PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 6
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 23275
LENGTH: 160
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Best Local Similarity
Matches 5; Conserva
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Best Local Similarity
Matches 5; Conserv
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LENGTH: 169
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APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS;
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
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                                                                                                                                                                              APPLICANT: Homburger et al.

TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REFERENCE: PARTIE APPLICATION NUMBER: US SEQ ID NOS: 62517

NUMBER OF SEQ ID NOS: 62517

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 39768

LENGTH: 139
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APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
TITLE OF INVENTION: Nucleic 326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 54985
LENGTH: 139
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US-09-270-767-39768
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BER: US 60/074,788
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                                                                                           US-09-270-767-39768
; Sequence 39768, Application US/09270767
; Patent No. 6703491
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                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT ORGANISM: Drosophila melanogaster
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Best Local Similarity 100.
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Best Local Similarity 100.
Matches 5; Conservative
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    47 PRGAP 51
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US-09-270-767-54985
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GENERAL INCORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE DF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE DF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 26521
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TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REFERENCE: FILE REFERENCE: FILE REFERENCE: FILE REFERENCE: FILE REFERENCE: 1996-03-17
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 60336
LENGTH: 220
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REFERENCE: File Reference: 7326-094
CURRENT PELICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 47191
LENGTH: 199
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                                                                                                                                                                                                                                                                                                         25.0%; Score 5; DB 4; Length 199; 100.0%; Pred. No. 1.98+02; tive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 26521, Application US/09252991A Patent No. 6551795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 60336, Application US/09270767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                  ; ORGANISM: Drosophila melanogaster
US-09-270-767-47191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5; Conservative
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Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                109 OMLET 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent No. 6703491 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                            13 QMLET 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9 RWVCQ 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34 RWVCQ 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Pseudo
US-09-252-991A-26521
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 28
US-09-270-767-60336
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
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                                                                                                                                                                              Sequence 21850, Application US/09252991A
Patent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS;
TITLE OF INVENTION: AEMCGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR RELIGIOR DATE: 1998-02-18
PRIOR RELIGIOR DATE: 1998-02-18
PRIOR RELIGIOR DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 21850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Ware U. Rubenfield et al.
APPLICANT: Ware U. Rubenfield de al.
APPLICANT: Ware U. Rubenfield and Amino ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
FULL REPERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR PRIOR DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 32100
LENGTH: 185
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25.0%; Score 5; DB 4; Length 183; 100.0%; Pred. No. 1.8e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
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US-09-270-767-47191
; Sequence 47191, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Pseudomonas aeruginosa
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Matches 5; Conser
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                                                 |||||
GAPMW 94
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                  GAPMW 7
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                                                                                                                                          RESULT 24
US-09-252-991A-21850
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS.

CURRENT PILIT REPERSORE: 107196-136

CURRENT FILING DATE: 1999-02-18

PRIOR PELICATION NUMBER: US 60/074,788

PRIOR FILING DATE: 1998-02-18

PRIOR APPLICATION NUMBER: US 60/094,190

PRIOR APPLICATION NUMBER: US 60/094,190

NUMBER OF SEQ ID NOS: 33142
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Pred. No. 2.2e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Yamaguchi, No. 57233180mi
APPLICANT: Kojima, Tetsuo
APPLICANT: Oh-Eda, Masayoshi
APPLICANT: Hattorii, Kunihiro
TITLE OF INVENTION: Genes Coding for Megakaryocyte
TITLE OF INVENTION: Potentiator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/426,819A
FILING DATE: 21-APR-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: Birch, Stewart, Kolasch & Birch STREET: P.O. Box 747
CITY: Falls Church STATE: Virgit Unit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                230-107P
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 37, Application US/08426819A; Patent No. 5723318
                                                                                                                                                                                                                                                                                                                                                                                                                                                               25.0%; Sco
100.0%; Pr
tive 0;
                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-28343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Murphy Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 23
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           37:
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TELEFAX: 703-205-8050
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       248 amino acids
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Best Local Similarity 100.
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Ste
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                                         GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                         SEQ ID NO 28343
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                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
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US-09-252-91A-23304

Sequence 23304, Application US/09252991A

Patent No. 6521795

GENERAL INFORMATION:

APPLICANT MATC J. Rubenfield et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

CURRENT APPLICATION NUMBER: US/09/252,991A

PRIOR PRIOR APPLICATION NUMBER: US 60/074,788

PRIOR FILING DATE: 1999-02-18

PRIOR PRIOR DATE: 1998-02-18

PRIOR DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 33142
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Patent No. 6380370

GENERAL INFORMATION:

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS

TITLE OF INVENTION: BPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: UNMBER: US/09/134,001C

CURRENT APPLICATION NUMBER: US 60/064,964

PRIOR APPLICATION NUMBER: US 60/064,964

PRIOR APPLICATION NUMBER: US 60/064,964

PRIOR FILING DATE: 1997-11-08

PRIOR FILING DATE: 1997-11-08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25.0%; Score 5; DB 3; Length 239; 100.0%; Pred. No. 2.2e+02; Live 0; Mismatches 0; Indels
                                    Indels
         Pred. No. 2.1e+02; Mismatches 0;
100.0%; Pred. ...
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US-09-252-991A-28343
; Sequence 28343, Application US/09252991A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT ORGANISM: Staphylococcus epidermidis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Pseudomonas aeruginosa
                                    5; Conservative
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Matches 5; Conservative
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Best Local Similarity 100.
Matches 5; Conservative
            Best Local Similarity
                                                                                                                       90 PRGAP 94
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                                                                              1 PRGAP 5
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                               Matches
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Sequence 1482, Application US/09710279
Patent No. 6703492
GENERAL INFORMATION:
APPLICANT KIMMERLY, WILLIAM JOHN
TILE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
FILE REFERENCE: DU3480US
CURRENT PAPLICATION NUMBER: US/09/710,279
CURRENT FILING DATE: 2000-11-09
PRIOR FILING DATE: 1999-11-09
PRIOR FILING DATE: 1999-11-09
SEQ ID NO SEQ ID NOS: 4472
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 1482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                              FEATURE:
GOTHER INFORMATION: Description of Artificial Sequence: synthetic
GOTHER INFORMATION: amino acid sequence
GOS-710-279-1482
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APPLICANT: GCLECHLICH, Emil C.
TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
TITLE OF INVENTION: GLIGOSACCHARIDES, AND GENES ENCODING THEM
NUMBER OF SOURNES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25.0%; Score 5; DB 4; Length 276, 100.0%; Pred. No. 2.5e+02; ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/312,387B
FILING DATE: July 7, 1994
CLASSIFICATION: 435
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MG-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 8, Application US/08312387B Patent No. 5545553
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 60
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201 487-5800
TELEPAX: 201 343-1684
                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 133521
INFORMATION FOR SEQ ID NO: 8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               : 279 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: New Jersey COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hackensack
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Best Local Similarity
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US-08-312-387B-8
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US-03-248-796A-27518

Sequence 27518, Application US/09248796A

Sequence 27518, Application US/09248796A

Sequence 27518, Application US/09248796A

Sequence 27518, Application US/09248796A

GENERAL INFORMATION:
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN

TITLE OF INVENTION: NUMBER: US/09/248,796A

TITLE OF INVENTION NUMBER: US 60/074,725

PRIOR APPLICATION NUMBER: US 60/074,725

PRIOR APPLICATION NUMBER: US 60/074,725

PRIOR FILING DATE: 1998-09-13

PRIOR FILING DATE: 1998-09-13

NUMBER OF SEQ ID NOS: 28208

SEQ ID NO 27518

LENGTH: 257
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APPLICANT:
APPLICANT:
MACC J. RUBERFIELD ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 21547
LENGTH: 259
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                      25.0%; Score 5; DB 1; Length 248; 100.0%; Pred. No. 2.3e+02;
                                                               0; Indels
                                                               0; Mismatches
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ORGANISM: Pseudomonas aeruginosa
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Best Local Similarity 100..
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                                                               5; Conservative
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                      Query Match
Best Local Similarity
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Matches 5; Conser
                                                                                                                                             115 PRGAP 119
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                                                                                                       1 PRGAP 5
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US-09-252-991A-21547
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                               Matches
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Sequence 8, Application US/08878360
Patent No. 5945322
GENERAL INFORMATION:
APPLICANT: Gotschlich, Emil C.
TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
TITLE OF INVENTION: OLIGOSACCHARIDES, AND GENES ENCODING THEM
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Klauber & Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25.0%; Score 5; DB 1; Length 279; 100.0%; Pred. No. 2.5e+02; ative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/683,458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600-1-095A
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                                                                                                                                                  COMPUTER READABLE FORM in WIDTOW TYPE: Floppy disk COMPUTER: IEM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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BEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PLILCATION NUMBER: 08/312,387
FILING DATE: September 26, 1994
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September 26, 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Jackson Esg., David A. REGISTRATION NUMBER: 26,742 REPERENCE/DOCKET NUMBER: 600-1 TELECOMMINICATION INFORMATION: TELEPHONE: 201487-5800 TELEFAX: 201343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 411 Hackensack Avenue CITY: Hackensack
              411 Hackensack Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: September 20
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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Best Local Similarity 100.
Matches 5; Conservative
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; MOLECULE TYPE: protein
US-08-683-458-8
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APPLICATION NUMBER:
FILING DATE: Septem
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COUNTRY: USA
ZIP: 07601
                                                                         New Jersey
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                                        Hackensack
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                                                                                                                             07601
                                                                                             COUNTRY:
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                                           Gaps
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APPLICANT: Gotschlich, Emil C.
TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
TITLE OF INVENTION: GLYCOSA AND GENES ENCODING THEM
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADARCH ACKNOW
STREET: 411 Hackensack Avenue
STREET: 411 Hackensack Avenue
STREET: 411 Hackensack Avenue
STREET: 18M PC compatible
COMPTRY: USA
COUNTRY: USA
COMPTRY: 18M PC compatible
COMPUTER READABLE FORM:
MEDIUM TYPE: 18M PC compatible
COMPUTER: 18M P
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APPLICANT: Gotschlich, Emil C.
TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
TITLE OF INVENTION: GLYCOSACCHARIDES, AND GENES ENCODING THEM
NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25.0%; Score 5; DB 1; Length 279; 100.0%; Pred. No. 2.5e+02; ive 0; Mismatches 0; Indels
                                           Indels
                                        0
              Pred. No. 2.5e+02;
100.0%; Preq. .v..
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                                                                                                                                                                                                                                                                                           Sequence 8, Application US/08683426 Patent No. 5705367
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ADDRESSEE: Klauber & Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          : 279 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 279 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: 133521
INFORMATION FOR SEQ ID NO:
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                                        5; Conservative
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MOLECULE TYPE: protein
US-08-683-426-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 5; Conserv
              Best Local Similarity
                                                                                                                                                  121 LETMF 125
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                                        Matches
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Sequence 8, Application US/10007267
Sequence 8. Application
Patent No. 6780624
GENERAL INFORMATION:
GENERAL INFORMATION:
GOLGGOSCHICH, Emil C.
TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
OLIGOSACCHARIDES, AND GENES ENCODING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 6, Application US/08312387B

Patent No. 554553

GENERAL INFORMATION:
APPLICANT: Gotschlich, Emil C.
TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
TITLE OF INVENTION: OLIGOSACCHARIDES, AND GENES ENCODING THEM
NUMBER OF SUGUENCE: 12
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 03-DEC-2001
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
FILING DATE: 15-Jun-1999
APPLICATION NUMBER: 08/312,387
FILING DATE: 15-Jun-1994
ATTORNEY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REFERENCE/DOCKET NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-095
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/007,267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 8:
                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Klauber & Jackson
STREET: 411 Hackensack Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 201 487-5800
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TELEX: 133521
INFORMATION FOR SEQ 1D NO: 8:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 07601
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                CITY: Hackensack
STATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IYPE: amino acid
    5; Conservative
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Matches 5; Conservative
                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 LETMF 125
                                                                               121 LETMF 125
                                       15 LETMF 19
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US-08-312-387B-6
                                                                                                                                         RESULT 41
US-10-007-267-8
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    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Gotschlich, Emil C.
TITLE OF INVENTION: GLYCOSYLITRANSFERASES FOR BIOSYNTHESIS OF
OLIGOSACCHARIDES, AND GENES ENCODING THEM
                                                                                                                                                                                                                                                                                                                                                                                  0;
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MEDIUM TYPE: FLOPPY disk

COMPUTER: ISM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/333,412

FILING DATE: 15-Jun-1999

CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25.0%; Score 5; DB 3; Length 279; 100.0%; Pred. No. 2.5e+02;
                                                                                                                                                                                                                                                                                                                                             Length 279;
                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                           DB 2; Ler
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                   NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-095B
TELECOMINICATION INFORMATION:
TELECAM: 201 487-5800
TELEA: 13321
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
TOPOLOGY: linear
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MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-09-333-412-8
                                                                                                                                                                                                                                                                                                                                             Score 5; 1
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/312,387
FILING DATE: July 7, 1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 411 Hackensack Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Klauber & Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Jackson Esq., David A. REGISTRATION NUMBER: 26,742
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TELEFAX: 201 343-1684
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Patent No. 6342382
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                           25.0%;
100.0%;
                                                                                                                                                                                 TYPE: amino acids
TOPOLOGY: limit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 12
  CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Hackensack
STATE: New Jersey
                                                                                                                                                                                                                                                                                                                      Ouery Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                 ; MOLECULE TYPE: protein US-08-878-360-8
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Best Local Similarity
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Gaps
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Patent No. 579823
Fatent No. 579825
Fatent No. 5
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Pred. No. 2.5e+02;
0; Mismatches 0; Indels
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5. 2.5e+02;
cches 0; Indels
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MEDIUM TREADALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPPRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Re-lease #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25.0%; Score 5; DB 1
100.0%; Pred. No. 2.5
:ive 0; Mismatches
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ER: 600-1-095A
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/312,387
FILING DATE: September 26, 1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/683,458 PILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                           25.0%; Scc...
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E: Klauber & Jackson
411 Hackensack Avenue
                                    TELEPHONE: 201 487-5800
TELEFAX: 201 343-1684
TELEX: 13351
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 280 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 201 487-5800
TELEFAX: 201 343-1684
    TELECOMMUNICATION INFORMATION:
                                                                                                                                                                   280 amino acids
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TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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Best Local Similarity 100.
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                              , MOLECULE TYPE: protein US-08-683-426-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Hackensack
STATE: New Jersey
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
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Patent No. 5705367

GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF

TITLE OF INVENTION: OLIGOSACCHARIDES, AND GENES ENCODING THEM

NUMBER OF SEQUENCES: 12

CORRESPONDENCE ADDRESS:

ADDRESSEE: Klauber & Jackson

STREET: 411 Hackensack Avenue

CITY: Hackensack

STATE: New Jersey

CONTYN: USA

CONTYN: USA

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: Batentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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                                                                                                                                                          COUNTRY: USAN ZIP: USAN ZIP: USAN ZIP: UFOLD TYPE: Floppy disk COMPUTER I IBM PC COMPATIBLE COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/312,387B FILING DATE: UNFORMATION: A35 ATTONEY/AGENT INFORMATION: NAVE: USCKST NUMBER: 26,742 REGISTRATION NUMBER: 600-1-095 REGISTRATION NUMBER: 600-1-095 TELECOMMUNICATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/683,426
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REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-095B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/312,387
FILING DATE: September 26, 1994
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
                                    411 Hackensack Avenue
Klauber & Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
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                                        STREET: 411 Hacker
CITY: Hackensack
STATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 LETMF 125
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ADDRESSEE:
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US-08-478-140B-6
COUNTRY:
ZIP: 100
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                                                               GENERAL INFORMATION:

APPLICANT: Gotschlich, Emil C.

APPLICANT: Gotschlich, Emil C.

TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF

TITLE OF INVENTION: OLIGOSACCHARIDES, AND GENES ENCODING THEM

NUMBER OF SEQUENCES: 12

CORRESPONDENCE ADDRESS:

ADDRESSEE: Klauber & Jackson

STREET: 411 Hackensack Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25.0%; Score 5; DB 2; Length 280; 100.0%; Pred. No. 2.5e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: JOHNSON, KARL F.
APPLICANT: BOTH, STEPHEN
THE OF INVENTION: METHOD OF TRANSFERRING AT LEAST TWO
TITLE OF INVENTION: METHOD OF TRANSFERRING AT LEAST TWO
TITLE OF INVENTION: POLYGLYCOSYLTRANSFERASE AND GENE ENC
TITLE OF INVENTION: POLYGLYCOSYLTRANSFERASE AND GENE ENC
TITLE OF INVENTION: POLYGLYCOSYLTRANSFERASE
TITLE OF SEQUENCES:
TUMBER OF SEQUENCES:
ADDRESSEE: Pennie & Edmonds
                                                                                                                                                                                                                                                                                                                                                  COMPUTER FRADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/878,360
FILING DATE: 18-JUN-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/683,426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600-1-095B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION.
FILING DATE:
APPLICATION NUMBER: 08/312,387
FILING DATE: September 26, 1994
CLASSIFICATION: 435
ATTORNEY AGRATION:
ATTORNEY AGRATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-0
TELECOMUNICATION INFORMATION:
TELECOMUNICATION 11FORMATION:
TELECOMUNICATION 11FORMATION:
TELECOMUNICATION 1343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6, Application US/08478140B Patent No. 6127153 GENERAL INFORMATION:
                        Sequence 6, Application US/08878360 Patent No. 5945322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 280 amin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 280 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
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                                                                                                                                                                                                                                                             CITY: Hackensack
STATE: New Jersey
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 LETMF 125
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TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF CITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF CITLE OF INVENTION: GLIGOSACCHARIDES, AND GENES ENCODING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: DELEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATE:
APPLICATION NUMBER: US/09/333,412
FILING DATE: 15-Jun-1999
CLASSIFICATION: CUNROWN>
PRIOR APPLICATION: AUNROWN>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/312,387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25.0%; Score 5; DB 3; Length 280; 100.0%; Pred. No. 2.5e+02; tive 0; Mismatches 0; Indels
                                                                                        COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Ploppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/478,140B

FILING DATE: 07-JUN-1995

CLASSIFICATION: 435
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ATTORNEY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Klauber & Jackson
STREET: 411 Hackensack Avenue
1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                            7188-017
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TELEPHONE: 201 487-5800
                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
ATTORNBY/AGENT INFORMATION:
NAME: Laura A. COTUZZI
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7188-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 6, Application US/09333412
Patent No. 6342382
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 280 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Hackensack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 07601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                 New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 LETMF 125
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                       CITY: New York
STATE: New Yor
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121 LETMF 125
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                                                                          RESULT 49
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                                                                                                                                                                                                                                            .
                                                                                                                                                                                                       DB 3; Length 280; . 2.5e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: JOHNSON, KARL F.
APPLICANT: ROTH, STEPHEN
APPLICANT: BOTH, STEPHEN
TITLE OF INVENTION: METHOD OF TRANSFERRING AT LEAST TWO
TITLE OF INVENTION: SACCHARIDE UNITS WITH A POLYGLYCOSYL
TITLE OF INVENTION: POLYGLYCOSYLTRANSFERASE
NUMBER OF SEQUENCES: B
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/338,943
                                                                                                                                                                                                                                          ..
                                                                                                                                                                                                   25.0%; Score 5; DB 3
100.0%; Pred. No. 2.5
tive 0; Mismatches
                                                                                         ; TOPOLOGY: linear; MOLECULE TYPE: protein; SEQUENCE DESCRIPTION: SEQ ID NO: 6: US-09-333-412-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE:
COMPUTER: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
"WENTER: IBM PC COMPATIBLE
"""TRM: PC DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/478,140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7188-017
                                                                        LENGIH: 280 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/09338943 Patent No. 6379933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Laura A. Coruzzi
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 716
TELECOMMUNICATION:
TELECOMMUNICATION: 1700-9090
TELEFAX: 201 343-1684
             TELEX: 133521
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                 Query Match
Best Local Similarity 100.v.,
Thes 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Laura A. Coruzzi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     : 280 amino acids
amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 1155 ...
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
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Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                    121 LETMF 125
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15 LETMF 19

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Gaps
RESULT #2,
US-10-007-267-6
; Sequence 6, Application US/10007267
; Patent No. 6780624
; GENERAL INFORMATION:
; APPLICANT: Gotschlich, Emil C.
; APPLICANT: Gotschlich, Emil C.
; TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
; TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Rosen et al. TITLE OF INVENTION: 49 Human Secreted Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 600-1-095
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/333,412
FILING DATE: 15-Unn-1999
APPLICATION NUMBER: 09/312,387
FILING DATE: U1y 7, 1994
ATTOREY/AGENT INFORMATION:
NAME: Jackson Esg., David A.
REGISTRATION NUMBER: 26,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/007,267
FILING DATE: 03-Dec-2001
CLASSIFICATION: vUNKnown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TILLE OF TAYABLALDAN 127 INCHES OF TAYABLALDAN 127 INCHES OF TAYABATAN 127 INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 411 Hackensack Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Klauber & Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-904-615-106
; Sequence 106, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 07601
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 280 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 201 487-5800
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TELEX: 133521
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Hackensack
STATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
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WESOUR 33-110-5101

Sequence 5101, Application US/09583110

Sequence 5101, Application US/09583110

Sequence 5101, Application US/09583110

Sequence 5101, Application Value of Acid Sequences Relating to Streptococcus GENERAL INFORMATION:

APPLICANT: Lynn Doucette-Stamm et al.

TITLE OF INVENTION: Nucleic Acid and Amino Acid Sequences Relating to Streptococcus TITLE OF INVENTION: Preumoniae for Diagnostics and Therapeutics

TITLE OF INVENTION: Preumoniae for Diagnostics and Therapeutics

TITLE OF INVENTION: PREUMO-07A

CURRENT PRILIG DATE: 2000-05-26

PRIOR APPLICATION NUMBER: US 60/085,131

PRIOR FILING DATE: 1998-05-12

PRIOR FILING DATE: 1998-05-12

PRIOR FILING DATE: 1997-07-02

NUMBER OF SEQ ID NOS: 5322

SEQ ID NOS: 5322
                                                                                                                                                                                                                                                                                                                                               Sequence 7849; Application US/09328352
; Sequence 7849; Application US/09328352
; Sequence 7849; Application US/09328352
; General Information:
    APPLICANT: Gary L. Breton et al.
    APPLICANTON UNCEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
    TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
    TITLE REFERENCE: GTC99-03PA
    CURRENT APPLICANION UNMERS: US/09/328,352
    CURRENT APPLICANION UNMERS: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 7849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25.0%; Score 5; DB 4; Length 297; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                           DB 4; Length 289; 2.6e+02;
                                                                                 25.0%; Score 5; DB 4
100.0%; Pred. No. 2.6
rative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Acinetobacter baumannii
          ; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-25496
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Matches 5; Conservative
                                                              Query Match
Best Local Similarity lvv...
5; Conservative
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Best Local Similarity 100.
Matches 5; Conservative
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US-09-328-352-7849
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APPLICANT: MARC J. Rubenfield et al.
APPLICANT: MARC J. Rubenfield et al.
APPLICANT: MARC J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE DE INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NOS: 33142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: MAC J. Rubenfield et al.
APPLICANT: MAC J. Rubenfield et al.
APPLICANT: MAC J. Rubenfield and AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR PILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 27676
LENGTH: 288
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                                                                                                                                                                                                                                                                                                                                                                                   25.0%; Score 5; DB 4; Length 283; 100.0%; Pred. No. 2.5e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: SITE
LOCATION: (283)
COTATION: (283)
STATE INFORMATION: Xaa equals stop translation
US-09-904-615-106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 52
US-09-252-991A-25496
; Sequence 25496, Application US/09252991A
; Patent No. 6551795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-252-991A-27676
; Sequence 27676, Application US/09252991A
; Patent No. 6551795
PRIOR FILING DATE: 1998-08-25
PRIOR APPLICATION NUMBER: 60/098,634
PRIOR FILING DATE: 1998-08-31
NUMBER OF SEQ ID NOS: 170
SOFTWARE: PALENTIN Ver. 2.0
SEQ ID NO 106
LENGTH: 283
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                                                                                                                                                                                                                                                                                                                                                                                                Query Match 25.0%
Best Local Similarity 100.0
Matches 5; Conservative
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ORGANISM: Homo sapiens
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Best Local Similarity
Matches 5; Conserv
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; Patent No. 6753149
; GENERAL INCPRARTION:
; APPLICANT: Human Genome Sciences, Inc. et al.
; TITLE OF INVENTION: Staphylococcus aureus genes and polypeptides
; FILE REFRENCE: PB484
; CURRENT PILING DATE: 2002-05-06
; PRIOR PILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: US/09/512,255A
; PRIOR APPLICATION NUMBER: US 60/098,964
; PRIOR APPLICATION NUMBER: US 60/099,964
; PRIOR FILING DATE: 1998-09-01
; PRIOR FILING DATE: 1998-09-01
; PRIOR FILING DATE: 1996-01-05
; PRIOR FILING DATE: 1996-01-05
; PRIOR FILING DATE: 1999-08-31
; PRIOR APPLICATION NUMBER: US 60/059/19726
; PRIOR FILING DATE: 1999-08-31
; RIOR APPLICATION NUMBER: US 08/956,171
; RIOR APPLICATION NUMBER: US 08/956,171
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PATENT NOS: 61
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                                                                                               COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastsEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/108,517
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/789,609
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Gimmi, Edward R
REGISTRENCE/DOCKET NUMBER: GMS0004
IRLECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-4478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Staphylococcus aureus
US-10-138-701-16
      ZIP: 19406-0939
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATABLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 308 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX:
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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; MOLECULE TYPE: protein
US-09-108-517-2
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPIRY: USA
ZIP: 19466-0939
COMPUTER READABLE FORM:
MEDLUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
SURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/789,609A
FILING DATE: US/08/789,609A
FILING DATE: APPLICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/030685
FILING DATE: 13-NOV-1996
ATTORNEY AGENT THORMATION:
NUMBER: CALCATION:
AND CALCATION NUMBER: APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION:
AND CALCATION NUMBER: APPLICATION NUMBER: APPLICATION:
AND CALCATION NUMBER: APPLICATION NUMBER: A
                                                                                                                                             APPLICANT: Gentry, Daniel
APPLICANT: Lonsdale, John
APPLICANT: Pearson, Stewart
APPLICANT: Payne, David
TITLE OF INVENTION: No. 5827689el FabD
VUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline Beecham Corporation
STREET: 709 Swedeland Road
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: SmithKline Beecham Corporation
STREET: 709 Swedeland Road
CITY: King of Prussia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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Patent No. 6258934
GENERAL INFORMATION:
APPLICANT: Gentry, Daniel
APPLICANT: Pearson, Stewart
APPLICANT: Pearson, Stewart
APPLICANT: Pearson, Stewart
APPLICANT: Pearson, Stewart
APPLICANT: Appre, David
TITLE OF INVENTION: No. 6258934e1 Fabb
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline Beecham Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 5; I
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Gimmi, Edward R
REGISTRATION NUMBER: 38,891
REGISTRATION NUMBER: GMS0004
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-4478
                                                    Sequence 2, Application US/08789609A Patent No. 5827689 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.0%; Py
Matches 5; Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 308 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 709 Swedeland
CITY: King of Prussia
STATE: PA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 610-270-447
TELEFAX: 610-270-5090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15 LETMF 19
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RESULT 55
US-08-789-609A-2
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US-09-108-517-2
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VS-09-252-991A-32186

VS-09-252-991A-32186

VS-09-252-991A-32186

Sequence 32186, Application US/09252991A

Patent No. 6551795

GENERAL INFORMATION:

APPLICANT: Marc J. Rubenfield et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

CURRENT APPLICATION NUMBER: US/09/252,991A

CURRENT FILING DATE: 1999-02-18

PRIOR FILING DATE: 1998-02-18

PRIOR FILING DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 33142

SEQ ID NO 32186

LENGTH: 330
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GENERAL INFORMATION:

APPLICANT: Marc J. Rubenfield et al.

APPLICANT: Marc J. Rubenfield et al.

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

CURRENT APPLICATION NUMBER: US/09/252,991A

CURRENT FILING DATE: 1999-02-18

PRIOR APPLICATION NUMBER: US 60/074,788

PRIOR FILING DATE: 1998-02-18

PRIOR FILING DATE: 1998-02-18

PRIOR FILING DATE: 1998-02-18

PRIOR FILING DATE: 1998-02-18

SEQ ID NO 19891

LENGTH: 339
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                                                                                                                                                                                                                                                                                                                                                    25.0%; Score 5; DB 4; Length 327; 100.0%; Pred. No. 2.8e+02; cive 0; Mismatches 0; Indels
                  CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
LENGTH: 327
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; Sequence 19891, Application US/09252991A
; Patent No. 6551795
                                                                                                                                                                                                                                                          TYPE: PRT CRGANISM: Pseudomonas aeruginosa US-09-252-991A-19369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
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Best Local Similarity 100.
Matches 5; Conservative
107196.136
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Best Local Similarity
Matches 5; Conserv
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APPLICANT: Lynn Doucette-Stamm et al
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
TITLE OF INVENTION: NUCLEIC ACID AND THERAPEUTICS
TITLE OF INVENTION: EPUDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: UNMBER: US/09/134,001C
CURRENT APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-01-08
PRIOR FILING DATE: 1997-08-14
NUMBER: OS EQ ID NOS: 5674
SEQ ID NO 4824
LIENGTH: 311
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APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
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Patent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield and AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPBUTICS
FILE REFERENCE: 107196.136
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Pred. No. 2.7e+02;
0; Mismatches 0; Indels
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5. 2.7e+02;
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100.0%; Pred. No.
                                                                                                                              ; Sequence 4824, Application US/09134001C; Patent No. 6380370
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100.0%;
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Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity
--hes 5; Conserve
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               45 LETMF 49
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LENGTH: 315
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APPLICANT: Marc J. Rubenfield et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERBNCE: 107196, 136
CURRENT APPLICATION NUMBER: US/09/252, 991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,190
PRIOR PILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-02-18
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 17858
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APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AREUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1939-02-18
PRIOR PILING DATE: 1939-02-18
PRIOR FILING DATE: 1938-07-27
NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER: NO 86/094,190
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NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
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                                                                                                                ; Sequence 17858, Application US/09252991A; Patent No. 6551795
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Patent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: ABRUGINOSA FOR DIAG.
TITLE OF INVENTION: ABRUGINOSA FOR DIAG.
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100.0%; Fic
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Best Local Similarity
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Matches 5; Conserv
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           18 PRGAP 22
                                                                                                                                                          GENERAL INFORMATION: APPLICANT: Marc J.
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                                                                     RESULT 65
US-09-252-991A-17858
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US-09-252-991A-31139
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LENGTH: 374
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APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AREUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-07
NUMBER OF SEQ ID NOS: 33142
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; OTHER INFORMATION: Identity of amino acid at the above locations are unknown. US-09-252-991A-20554
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APPLICANT: Homburger et al.
ITITE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
ITITE OF INVENTION: Nucleic 2326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 46634
                                                                                                                Gaps
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                                               DB 4; De...
No. 2.9e+02;
0; Indels
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No. 3e+02;
0; Indels
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                                                            25.0%; Score 5; DB 4
100.0%; Pred. No. 2.9
cive 0; Mismatches
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100.0%; Pred. No. 3e+
ive 0; Mismatches
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Patent No. 6551795
                                                                                                                                                                                                                                                                                               Sequence 46634, Application US/09270767 Patent No. 6703491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT ORGANISM: Drosophila melanogaster
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT ORGANISM: Pseudomonas aeruginosa
                                                          Query Match
Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                        94 PRGAP 98
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  ; ORGANISM: £500000
US-09-252-991A-19891
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US-09-252-991A-20554
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LENGTH: 358
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APPLICANT: GARY L. Breton et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERENCE: GTC99-039-08-05
CURRENT APPLICATION NUMBER: US/09/328,352
CURRENT FILING DATE: 1999-06-04
NUMBER OF SEQ ID NOS: 8252
                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE DE INVENTION: ABRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NOS: 33142
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25.0%; Score 5; DB 4; Length 420; 100.0%; Pred. No. 3.56+02; cive 0; Mismatches 0; Indels
                                                            Length 395;
                                                                                                        0; Indels
                                                              DB 4; Len
                                                25.0%; Scc...
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                    US-09-252-991A-30428
; Sequence 30428, Application US/09252991A
; Patent No. 6551795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , Sequence 5815, Application US/09328352; Patent No. 6562958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 2, Application US/08396218
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Pseudomonas aeruginosa
  ; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-26116
                                                                                                          Conservative
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Best Local Similarity 100.
Matches 5; Conservative
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                                          Query Match
Best Local Similarity
5, Conserv?
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                                                                                                                                                  1 PRGAP 5
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LENGTH: 421
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US-08-396-218-2
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Sequence 26116, Application US/09252991A

Patent No. 6521795

GENERAL INFORMATION:

APPLICANT: Marc J. Rubenfield et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

CURRENT APPLICATION NUMBER: US/09/252,991A

CURRENT FILING DATE: 1999-02-18

PRIOR FILING DATE: 1998-02-18

PRIOR FILING DATE: 1998-07-18

PRIOR FILING DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 33142

LENGTH: 395
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AREUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 107196.136

CURRENT FILING DATE: 1999-02-18

PRIOR APPLICATION NUMBER: US 60/074,788

PRIOR PILING DATE: 1998-02-18

PRIOR FILING DATE: 1998-02-18

PRIOR FILING DATE: 1998-07-27

SEQ ID NOS: 33142

SEQ ID NOS: 33142

LENGTH: 394
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Pred. No. 3.3e+02;
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; FILE REFERENCE: 107196.136

; CURRENT APPLICATION NUMBER: US/09/252,991A

; CURRENT FILID DATE: 1999-02-18

; PRIOR APPLICATION NUMBER: US 60/074,788

; PRIOR FILING DATE: 1998-02-18

; PRIOR FILING DATE: 1998-02-18

; NUMBER OF SEQ ID NOS: 33142

; SEQ ID NO 22047

; LENGTH: 378
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                                                                                                                                                                                                                                       ) ORGANISM: Pseudomonas aeruginosa US-09-252-991A-23047
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ses 5; Conservative
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Matches
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Pred. No. 3.5e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Strohl, William R.
APPLICANT: Strohl, Michael L.
APPLICANT: Dickens, Michael L.
APPLICANT: DeSanti, Charles L.
TITLE OF INVENTION: METHOD OF PRODUCING DOXORUBICIN WUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/760,116
FILING DATE: 3-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/096,982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: CALFEE, HALTER & GRISWOLD
STREET: 800 Superior Avenue, Suite 1400
CITY: Cleveland
                                                                                                                                                                                                                                                            36,105
R: P1615-6007
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                                                                                                                      FILING DATE: 3-DEC-1996
CLASSIFICATION: 435
RIOR APPLICATION DATA:
APPLICATION NUMBER: 08/396,218
FILING DATE: 27-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: KITTS, MONICA C
REGISTRATION NUMBER: 36,105
REFERENCE/DOCKET NUMBER: 91615-60
TELECOMMUNICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25.0%; Scor.
100.0%; Pre
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ZIP: 44114-2688
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: GOLICK, MATY E.
REGISTRATION NUMBER: 2272
TELECOMMUNICATION INFORMATION:
TELEPHONE: 216-622-6458
TELEPHONE: 216-621-616
                                                                                                                                                                                                                                                                                                                                         TELEFAX: 202/638-4810
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                           202/638-5000
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amino acid
3Y: linear
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Best Local Similarity luv...
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 422 amino acids
TYPE: amino acid
TOPOLOGY: linear
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MOLECULE TYPE: protein
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CLASSIFICATION:
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                                                APPLICANT:
APPLICANT:
COLOMBO, Anna L
APPLICANT:
COLOMBO, Anna L
APPLICANT:
COLOMBO, Charles R
APPLICANT:
OTTEN, Sharee
APPLICANT:
OTTEN, Sharee
APPLICANT:
CORRESPONDENCE SEQUENCES:
NUMBER OF SEQUENCES:
ADDRESSEE:
ADDRESSEE:
ADDRESSEE:
STREET: 655 Fifteenth Street, N. W., Suite 330 - G
STREET: Street Lobby
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: INVENTI, Augusto
APPLICANT: BREME, Unberto
APPLICANT: DECOMBO, Anna L
APPLICANT: CLOMBO, Anna L
APPLICANT: OTTEN, Sharee
APPLICANT: OCTEN, Sharee
APPLICANT: STOUTT, Claudio
TITLE OF INVENTION: PROCESS FOR PREPARING DOXORUBICIN
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: NIKAIDO, MARMELSTEIN, MURRAY & ORAM LLP
STREET: Street Lobby
COTY: Mashington
COTY: Mashington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 422;
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                                                                                                                                                                                                                                                                                                               COUNTRY: USA

CONFUTER EADABLE FORM:
MEDIUW TYPE: RIOPPY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/396,218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25.0%; Score 5; DB 1
100.0%; Pred. No. 3.5
tive 0; Mismatches
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US-08-760-116-2
; Sequence 2, Application US/08760116
; Patent No. 5786190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: KITTS, MONICA C
REGISTRATION NUMBER: 36,105
REFERENCE/DOCKET NUMBER: P161
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36,105
                  GENERAL INFORMATION:
APPLICANT: INVENTI, Augusto
APPLICANT: BREME, Umberto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS.
LENGTH: 422 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: 202/638-5000
TELEFAX: 202/638-4810
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; MOLECULE TYPE: protein US-08-396-218-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                            CITY: Washington
STATE: DC
COUNTRY: USA
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Best Local Similarity
Matches 5; Conserv
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20005-5701
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      Patent No. 5695966
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STATE:
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            25.0%; Score 5; DB 2; Length 422; 100.0%; Pred. No. 3.5e+02; tive 0; Mismatches 0; Indels
                                                             Query Match 25.0
Best Local Similarity 100.
Matches 5; Conservative
; MOLECULE TYPE: protein US-09-096-982-5
                                        325 PRGAP 329
                                1 PRGAP 5
                                                      RESULT 75
US-08-653-650A-5
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                                        qq
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Query Match
Best Local Similarity 100.0%; Pred. No. 3.5e+02;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy | PRGAP 5
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Db 325 PGAP 329
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Search completed: October 26, 2004, 07:25:06 Job time : 24.25 secs

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QQBECS
                                                            A97342
D70935
S28710
S33204
AD1594
D75295
F82743
AH1106
H81294
S58124
D69061
                                                         I46688
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B81429
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T29697
T20657
B89833
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C70823
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G90275
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T29698
H83956
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T21429
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E70745
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G72776
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AB2574
AH1312
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T02347
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F86586
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AF1398
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AI1889
D96761
T29932
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T13289
T40115
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T09489
A48329
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T47298
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conserved hypothet
                               ; Search time 16.5 Seconds (without alignments) 116.626 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                   spasmolytic
                                                                                                                                                                                                       Description
    GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                    283416 seqs, 96216763 residues
                                                                                                                                                                                        SUMMARIES
                                                                                                                              summaries
                      - protein search, using sw model
                                October 26, 2004, 07:05:46
                                                 US-10-066-965A-4
20
1 PRGAPMWLRCVCQMLETKFL 20
                                                                     OLIGO
Gapop 60.0 , Gapext 60.0
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D72579
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A72518
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I53637
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Maximum DB seq length: 2000000000
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2: pir2:*
3: pir3:*
4: pir4:*
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                                                  Title:
Perfect ;
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A;Residues: 1-421 <SIM>
A;Cross-references: UNIPROT:Q9PEVO; GB:AE003932; GB:AE003849; NID:g9105849; PIDN:AAF8373
                                                                                                                          Rishmental source: strain 935

Rishmson, A.J.G.; Reinach, E.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; A. Briones, M.R.S.; Bueno, M.R.P.; Camargo, L.E.A.; Carraro, D.M.; Carrer, H. as-Neco, E.; Bocena, C.; El-Dorry, H.; Facincani, A.P.; Ferreira, A.J.S.
submitted to Genbank, June 2000
A,Authors: Ferreira, V.C.A.; Ferro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohm J.D.; Junqueira, M.L.; Kemper, E.L.; Kitajima, J.P.; Krieger, J.E.; Marques, M.V.; Martins, E. A.,Authors: Nartins, E.M.Y.; Madeira, A.M.B.N.; Madeira, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.; F.G.; Nunes, L.R.; Oliveira, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.; F.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A.; Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasak, A.T. trainako, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Zawasak, A.R. Santane, D. M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Zawasak, A.R.; Santanecon number: A.S.9328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R.Heidelberg, J.F.; Bisen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; Dodson, R.J.; chardson, D.; Ermolaeva, M.D.; Vamathevan, J.; Bass, S.; Qin, H.; Dragoi, I.; Sellers, P. I. R.R.; Makalanos, J.J.; Venter, J.C.; Fraser, C.M.
Nature 406, 477-483, 2000
A;Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae.
A;Reference number: A82035; MUID:20406833; PMID:10952301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A,Residues: 1-434 <HEI>
A,Cross-references: UNIPROT:Q9KVU5; GB:AE004096; GB:AE003852; NID:g9654440; PIDN:AAF9322
A,Experimental source: serogroup 01; strain NI6961; biotype El Tor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sun protein VC0044 [imported] - Vibrio cholerae (strain N16961 serogroup O1) C;Species: Vibrio cholerae C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein C33G3.1 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T19690
R;Matthews, L.
Submitted to the EMBL Data Library, August 1996
A;Reference number: Z19163
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5. 28;
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100.0%; Pred. No. 28;
ative 0; Mismatches
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100.0%; Pred. No. 28;
tive 0; Mismatches
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A,Map position: 1
C,Superfamily: hypothetical protein HI0624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Superfamily: hypothetical protein HI0624
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Best Local Similarity
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Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Contents: annotation C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Accession: G82372
A;Status: preliminary
A;Status: preliminary
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T19690
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                                                                                                                              hypothetical protein s111925 - Synechocystis sp. (strain PCC 6803)
C;Species: Synechocystis sp.
A;Variety: PCC 6803
A;Variety: PCC 6803
A;Variety: PCC 6803
C;Date: 25-Apr.1997 #sequence_revision 25-Apr.1997 #text_change 09-Jul-2004
C;Accession: S75336
C;Accession: S75336
C;Accession: S.; Kotani, H.; Tanaka, A.; Asamizu, E.; Nakamura, Y.; Miyajima, N.;
O, K.; Okumura, S.; Shimpo, S.; Takeuchi, C.; Wada, T.; Watanabe, A.; Yamada, M.; Yasuda
DNA Res. 3, 109-136, 1996
A;Title: Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis
S.
A;Reference number: S74322; MUID:97061201; PMID:8905231
A;Accession: S75336
A;Status: mucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-238 «KAN>
A;Residues: 1-238 «KAN>
A;Cross-references: UMIPROT:P73223; EMBL:D90904; GB:AB001339; NID:g1652225; PIDN:BAA1725
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C.Species: Xylella fastidiosa
C.Species: Xylella fastidiosa
C.Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
C.Accession: A82744
R.;anonymous. The Xylella fastidiosa Consortium of the Organization for Nucleotide Sequen
Nature 406, 151-157, 2000
A;Title: The genome sequence of the plant pathogen Xylella fastidiosa.
A;Reference number: A82515; MUD:20365717; PMLD:10910347
A;Note: for a complete list of authors see reference number A59328 below
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shikimate 5-dehydrogenase aroD [imported] - Bacillus halodurans (strain C-125)
C;Species: Bacillus halodurans
C;Species: Bacillus halodurans
C;Species: Bacillus halodurans
C;Accession: D83815
R;Takami, H; Nakasone, K; Takaki, Y; Maeno, G; Sasaki, R; Masui, N; Fuji, F; Hira
Nucleic Acids Res. 28, 4317-4331, 2000
A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and A;Reference number: A83650; MUD:20512582; PMID:11058132
A;Accession: D83815
A;Cross-references: UNIPENCIGORD93; GB:AP001511; GB:BA000004; NID:g10173727; PIDN:BAB050
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Genetics:
A, Gene: arob
C, Superfamily: Shikimate 5-dehydrogenase; shikimate dehydrogenase homology
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100.0%; Pred. No. 20;
cive 0; Mismatches
ALIGNMENTS
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Length 434; 0; Indels

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___protein - rabies virus (isolate WR17)
C;Species: rabies virus
C;Species: rabies virus
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C;Accession: PQ0363
R;Sacramento, D.; Badrane, H.; Bourhy, H.; Tordo, N.
J;Gan. virol. 73, 1149-1188, 1992
A;Title: Molecular epidemiology of rabies virus in France: Comparison with vaccine strair A;Reference number: PQ0340; MUID:92268873; PMID:1588319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R.Proost, P.; Wuyts, A.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Opdenakker, G.; Van Dêbochemistry 32, 10170-10177, 1993
A.fitle: Human and bovine granulocyte chemotactic protein-2: complete amino acid sequence A.Reference number: A54188; MUID:94001982; PMID:8399143
A.Accession: B54188
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A;Experimental source: specific host Chlorella strain NC64A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Appointational protein a506R - Chlorella virus PBCV-1
C;Species: Chlorella virus PBCV-1
C;Species: Chlorella virus PBCV-1
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T18008
R;Graves, M.V.; Van Etten, J.L.
submitted to the EMBL Data Library, May 1999
A;Reference number: Z18806
A;Accession: T18008
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C;Species: Bos primigenius taurus (cattle)
C;Date: 13-Sep-1994 #sequence_revision 18-Nov-1994 #text_change 12-Apr-1995
C;Accession: B54188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 34;
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A.Note: sequence extracted from NCBI backbone (NCBIP:137967)
C.Superfamily: beta-thromboglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A,Status: preliminary; translated from GB/EMBL/DDBJA,Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25.0%; Score 5; DB 2;
100.0%; Pred. No. 84;
ative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 25.0%; Score 5; DB 2
Best Local Similarity 100.0%; Pred. No. 47;
Matches 5; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A,Accession: PQ0363
A,Molecule type: mRNA
A,Residues: 1-34 cSAC
A,Cross-references: UNIPROT:091PJ5
C,Superfamily: rhabdovirus L protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5; Conservative
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A,Molecule type: protein
A,Residues: 1-75 <PRO>
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Best Local Similarity
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A; Note: a506R
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B54188
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                                                                                                                     RESULT
PQ0363
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C.Species: rabies virus
C.Accession: P00341
R.Sacramento, D.; Badrane, H.; Bourhy, H.; Tordo, N.
G. Gen. Virol. 73, 1149-1158, 1992
A.Fittle: Molecular epidemiology of rabies virus in France: Comparison with vaccine strail A.Fittle: Molecular epidemiology of rabies virus in France: Comparison with vaccine strail A.Reference number: P00340; MUID:92268873; PMID:1588319
A.Accession: P00341
A.Residues: 1-34 <AAC.
A.Residues: 1-34 <AAC.
A.Cross-references: UNIPROT:Q9IPJ5
A.Note: this sequence was obtained from isolates: WR56, WR06, WR39, WR18, WR63, WR
C.Superfamily: rhabdovirus L protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hypothetical protein F54B3.1 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T22613
R;McMurray, A.
R;Status: preliminary; translated from GB/EMBL/DDBJ
A;Mclecule type: DNA
A;Mcle
                               A, Status: preliminary; translated from GB/EMBL/DDBJ
A, Molecule type: DNA
A, Residues: 1-767 < WIL>
A, Cross-references: UNIPROT: Q93325; EMBL: Z78540; PIDN: CAB01738.1; GSPDB: GN00028; CESP: C3
C, Genetics:
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A;Introns: 52/3; 109/3; 269/1; 295/1; 432/1; 560/2; 747/2; 938/3; 1073/1; 1719/2; 1877/2
C;Superfamily: Caenorhabditis elegans hypothetical protein F54B3.1
                                                                                                                                                                                                                                                                                                A;Map position: X
A;Introns: 57/3; 72/3; 95/1; 143/3; 240/3; 285/3; 336/3; 419/3; 585/2; 658/3; 690/3; 757
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                                                                                                                                                                                                                                                                                                                                                                                                                     Length 767;
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25.0%; Score 5; DB 2;
Best Local Similarity 100.0%; Pred. No. 47;
Matches 5; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 30.0%; Score 6; DB 2; Best Local Similarity 100.0%; Pred. No. 45; Matches 6; Conservative 0; Mismatches
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A;Map position: X
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A; Accession: T19690
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Gaps

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C,Accession: F66219
R;Smith, D.R.; Doucette-Stamm, L.A.; Deloughery, C.; Lee, H.; Dubois, J.; Aldredge, T.;
Qiu, D.; Spadafora, R.; Vicaire, R.; Wang, Y.; Wierzbowski, J.; Gibson, R.; Jiwani, N. Ki, S.; Church, G.M.; Daniels, C.J.; Mao, J.; Rice, P.; Noelling, J.; Reeve, J.N.
J. Bacteriol. 179, 7135-7155, 1997
A;Title: Complete genome sequence of Methanobacterium thermoautotrophicum Delta H: funct A;Reference number: A69000; MUID:98037514; PMID:9371463
A;Accession: F69219
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Residues: 1-77 (MTH)
                                                                                                                                                                                                                                                                                           A,Cross-references: UNIPROT:026981; GB:AE000865; GB:AE000666; NID:g2621984; PIDN:AAB8539 C,Genetics:
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A;Fitle: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Aeropyr A;Reference number: A72450; MUID:99310339; PMID:10382966
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A;Residues: 1-102 <RXM>
A;Cross-references: UNIPROT:Q9YA21; DDBJ:AP000063; NID:g5105654; PIDN:BAAB1129.1; PID:g5
A;Experimental source: strain Kl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    platelet factor 4 - pig
platelet factor 4 - pig
platelet factor 4 - pig
C;Species: Sus screfa domestica (domestic pig)
C;Species: 10-Mar-1998 #sequence_revision 10-Mar-1998 #text_change 09-Jul-2004
C;Date: 10-Mar-1998 #sequence_revision 10-Mar-1998 #text_change 09-Jul-2004
C;Accession: S69133
Bur. J. Biochem. 228, 658-664, 1995
A;Title: The complete primary structure of glycosylated porcine platelet factor 4.
A;Reference number: S69133, MUID:95255268; PMID:7737160
A;Accession: S6913
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-90 -RRO.
A;Coss_references: UNIPROT:P30034
A;Coss_references: UNIPROT:P30034
C,Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 09-Jul-2004
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C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jul-2004
C;Accession: A72518
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Pred. No. 1e+02;
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100.0%; Pred. No. 91;
rative 0; Mismatches
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100.0%; Pred. No. ...
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Best Local Similarity
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Best Local Similarity
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A,Gene: APE2118
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A,Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A.; Ma Ok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, A; Title: Comparative genomics of Listeria species.
A;Reference number: AB1017; MUD:21537279; PMID:11679669
A;Recession: AB1212
A;Return Spreliminary
A;Molecule type: DNA
A;Residues: 1-76 <GLA>
A;Cross-references: UNIPROT:Q8Y820; GB:NC_003210; PIDN:CAC99176.1; PID:g16410500; GSPDB: A;Gene: Imo1098
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C;Species: Methanobacterium thermoautotrophicum
                                                                                                                                                                                                                                                                                  hypothetical protein Y40B1A.1 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: L5-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T26778
R;Harris, B.
submitted to the EMBL Data Library, December 1998
A;Recence number: Z20264
A;Accession: T26778
A;Accession: Captiminary; translated from GB/EMBL/DDBJ
A;Residues: 1-75 cwll.>
A;Cross-references: UNIPROT:Q9XW29; EMBL:AL034392; PIDN:CAA22304.1; CESP:Y40B1A.1
A;Experimental source: clone Y40B1A
A;Gene: CESP:Y40B1A.1
A;Introns: 61/3
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TN916 ORF8 homolog lmo1098 [imported] - Listeria monocytogenes (strain EGD-e)
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C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004
C;Accession: AB1212
R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche,
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25.0%; Score 5; DB 2
100.0%; Pred. No. 89;
live 0; Mismatches
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100.0%; Pred. No. 89;
iive 0; Mismatches
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probable thioredoxin - Halobacterium sp. (strain NRC-1) plasmid pNRC100
NyAlternate names: hypothetical protein H0606; hypothetical protein H1757
Cispecies: Halobacterium sp.
A'Variety: strain NRC-1
Cibate: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004
Cibate: 11-Jun-1999 #text_change 09-Jul-2004
C
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A; Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrobacterium tume A; Reference number: A97359; MUID:21608551; PMID:11743194
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                                                                                                                                                                                                                    A,Title: Structure and neutrophil-activating properties of a novel inflammatory peptide A,Reference number: JH0558; MUID:92078844; PMID:1744577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        F;37-114/Product: neutrophil-activating peptide ENA-78 #status experimental <MAT>
A,Molecule type: mRNA
A,Residues: 1-114 <RES.
A;Cross-references: BMEL:X78686; NID:g471242; PIDN:CAA55355.1; PID:g471243
A;Cross-references: R.; Car, B.; Baggiolini, M.; Kunkel, S.L.; Strieter, R.M.
J. Exp. Med. 174, 1355-1362, 1991
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ilarity 100.0%; Pred. No. 1.2
Conservative 0; Mismatches
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A,Introns: 37/1; 81/3; 109/2
C,Superfamily: beta-thromboglobulin
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A; Residues: 37-70;93-114 < WAL2>
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A; Residues: 43-114 < WAL1>
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A;Molecule type: DNA
A;Residues: 1-114 <KUR>
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A;Title: Characterization of the gene for human neutrophil-activating peptide 78 (ENA-78 A;Title: Characterization of the gene for human neutrophil-activating peptide 78 (ENA-78 A;Title: Characterization of the gene for human neutrophil-activating peptide 78 (ENA-78 A;Title: Characterization of the gene for human neutrophil-activating peptide 78 (ENA-78 A;Title: Characterization of the gene for human neutrophil-activating peptide 78 (ENA-78 A;Ceession: UC2433 MUD:95091791; PMID:7999089 A;Accession: UC2433 A;Molecule type: DNA A;Residues: 1-114 <COR>A;Residues: 1-114 <COR>A;Cors-references: UNIPROT:P42830; GB:L37036; NID:g607030; PIDN:AAA86426.1; PID:g607031 R·Chand. M.: McNinch, U.; Basu, R.; Simonet, S.
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J. Biol. Chem. 269, 25377-25282, 1994
A;Title: Cloning and characterization of the human neutrophil-activating peptide (ENA-78
A;Reference number: A55010; MUID:95014315; PMID:7929219
A;Accession: A55010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Agrobacterium tunefaciens
C;Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 09-Jul-2004
C;Accession. AF2744
R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; Chen, L.; Wood, G.E.; Chen, Y.; Woo, I erage, G.; Gillet, W.; Grant, C.; Guenthner, D.; Kutyavin, T.; Levy, R.; Li, M.; McClell S; Caip. P.; Romero, P.; Zhang, S.
Science 294, 2317-2323, 2001
A;Authors: Yoo, H.; Tao, Y.; Biddle, P.; Jung, M.; Krespan, W.; Perry, M.; Gordon-Kamm,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-113 <KUR>
A;Cross-references: UNIPROT: QBUFN1; GB:AE008688; PIDN:AAL42372.1; PID:g17739780; GSPDB:G
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A; Residues: 1-12, 'S', 14-114 < CHA>
A; Cross-reneces: GB: U12709
R; Power, C.A.; Furness, R.B.; Brawand, C.; Wells, T.N.
Gene 151, 333-334, 1994
A; Title: Cloning of a full-length cDNA encoding the neutrophil-activating peptide ENA-78
A; Reference number: 137357; MUID: 95129887; PMID: 7828901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hypothetical protein Atul366 [imported] - Agrobacterium tumefaciens (strain C58, Dupont)
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A, Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens C58.
A, Reference number: AB2577; MUID:21608550; PMID:11743193
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N;Alternate names: epithelial-derived neutrophil-activating peptide 78 (ENA-78)
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                                                                                          DB 2; Length 102;
C, Superfamily: Aeropyrum pernix hypothetical protein APE2118
                                                                                     / Match 25.0%; Score 5; DB 2; Leng Local Similarity 100.0%; Pred. No. 1.1e+02; les 5; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Genetics:
A;Gene: Atul366
A;Map position: circular chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5; Conservative
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Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                      35 APMWL 39
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                                                                                          Query Match
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Matches
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A,Molecule_type: DNA_A;Residues: 1-123 <KMV>
A;Residues: 1-123 <KMV>
A;Cross-references: UNIPROT:Q9YAM7; DDBJ:AP000062; NID:g5105244; PIDN:BAA80921.1; PID:d1
A;Experimental source: strain K1
C;Genetics:
A;Gene: APE1916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       probable bacteriophage protein (partial) YPO1259 [imported] - Yersinia pestis (strain CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Yersinia pestis
C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004
C;Accession: AB0154
C;Accession: AB0154
R;Parkhill, J; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B. deno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.; il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell, Nature 413, 523-527, 2001
A;Title: Genome sequence of Yersinia pestis, the causative agent of plague.
A;Reference number: AB0001; MUID:21470413; PMID:11586360
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A;Modecule type: DNA
A;Residues: 1-127 <KUIX>
A;Cross-references: UNIPROT:Q8ZGM8; GB:AL590842; PIDN:CAC90093.1; PID:g15979313; GSPDB:G
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C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C, Superfamily: Glycyl radical cofactor protein YfiD; glycyl radical homology
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                                                                                                                                                                                                                                                                                                                          Length 123;
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Pred. No. 1.3e+02;
0; Mismatches 0;
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Pred. No. 1.4e+02;
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100.0%; Pre
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Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-127 <KUR>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        34 PRGAP 38
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRGAP 5
                   A;Status: preliminary
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A; Status: translated from GB/EMBL/DDBJ
A; Status: translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-119 < NGNA
A; Residues: 1-119 < NGNA
A; Cross-references: UNIPROT: O46709; EMBL: AF016485; NID: 92822278; PID: 92822332; HALOSP: HG
A; Genetics: COP1
A; Genetics: COP1
A; Accession: T08372
A; Status: translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-119 < DNA
A; Genetics: COP2
A; Genetics: COP2
C; Genetics: COP2
C; Genetics: COP2
C; Genetics: COP2
A; Genetics: COP2
A; Genetics: COP2
A; Genetics: COP2
C; Genetics: COP2
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A; Genetics: COP2
C; Genetics: COP3
C; Genetics: COP
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T11049
hypothetical protein ORF119 - Chlamydomonas eugametos mitochondrion
C;Species: mitochondrion Chlamydomonas eugametos
C;Species: mitochondrion Chlamydomonas eugametos
C;Bacesion: T11049
R;Denovan-Wright, E.M.; Nuedelau, A.M.; Lee, R.W.
R;Denovan-Wright, E.M.; Nuedelau, A.M.; Lee, R.W.
R;Denovan-Wright, E.M.; Nuedelau, A.M.; Lee, R.W.
A;Title: Complete sequence of the mitochondrial DNA of Chlamydomonas eugametos.
A;Reference number: Z17244; MUID:98145434; PMID:9484440
A;Recession: T11049
A;Resion: T11049
A;Resion: T11049
A;Resion: I11049
A;Resion: I11049
A;Resion: I11049
A;Resion: L119 cDEN
A;Resion: L119 cDEN
A;Resion: L119 cDEN
A;Resion: L110 cDEN
A;Resion: L11
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C;Species: Aeropyrum pernix
C;Species: 20-Aug-1999 #text_change 09-Jul-2004
C;Accession: D72579
R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; Takah awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; K A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Aeropyr A;Reference number: A72450; MUID:99310339; PMID:10382966
A;Accession: D72579
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100.0%; Pred. No. 1.3e+02;
live 0; Mismatches 0;
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100.0%; Pred. No. 1.3
:ive 0; Mismatches
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Best Local Similarity 100.
Matches 5; Conservative
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Matches 5; Conserv
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A;Status: preliminary
A;Status: preliminary
A;Status: preliminary
A;Status: preliminary
A;Ratus: preliminary
A;Ratus: preliminary
A;Rolecule type: DNA
A;Residues: 1-142 CSIM>
A;Experimental source: strain 9a5c
B;Experimental source: strain 9a5c
A;Experimental source: strain 9a5c
A;Experimental source: strain 9a5c
B;Experimental source: strain 9a5c
A;Experimental source: strain 9a5c
B;Experimental source: strain 9a5c
B;Experimental source: canado, R.C.; Arruda, P.; Abreu, F.A.; Carraro, D.M.; Carrer, H.
Briones, M.R.S.; Benco, M.R.P.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Fronco, M.C.; Fronco, M.C.; Franco, M.C.; Marchors: Marchins, E.M.F.; Marchors: M.C.; Goliveira, M.C.; Goliveira, R.C.; Palmieri, D.A.; Rodrigues, V.; Rosa, A.J. de M.; Ge Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasaki A;Authors: da Silva, A.C.R.; da Silva, M.A.; Glasiva, M.A.; da Silva, V.E.; Zawasaki A;Authors: da Silva, Vallada, H.; Vallada, H.; Vallada, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Zamanco, M.L.; Zamanco, M.L.
                                                                                          N.Alternate names: GARG-8/LIX; glucocorticocoid-attenuated response gene 8 C;Species: Mus musculus (house mouse) C;Species: Mus musculus (house mouse) C;Date: 08-Dec-1995 #sequence_revision 08-Dec-1995 #text_change 09-Jul-2004 C;Accession: A57325 #sequence_revision 08-Dec-1995 #text_change 09-Jul-2004 R;Smith, J.B.; Herschman, H.R. J. Biol. Chem. 270 16756-16765, 1995 A;Tile: Glucocorticoid-attenuated response genes encode intercellular mediators, includi A;Reference number: A57325; MuID:95348101; PMID:7622488
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CiDate: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
CiAccession: G82796
Rianonymous, The Xylella fastidiosa Consortium of the Organization for Nucleotide Sequenc
Nature 406, 151-157, 2000
Airlie: The genome sequence of the plant pathogen Xylella fastidiosa.
Airlece number: A82515; MUD: 20365717; PMID: 10910347
Airlece for a complete list of authors see reference number A59328 below
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Status: preliminary; not compared with conceptual translation
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Roses: 1-132 <SMI->
A;Cross-references: UNIPROT: P50228; GB:U27267; NID: 9950158; PIDN: AAC52238.1; PID: 9950159
C;Superfamily: beta-thromboglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hypothetical protein XF0524 [imported] - Xylella fastidiosa (strain 9a5c)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25.0%; Score 5; DB 2; Length 132; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
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100.0%; Pred. No. 1.5e+02;
iive 0; Mismatches 0; Indels
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Matches 5; Conservative
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Best Local Similarity
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C, Genetics:
A, Gene: XF0524
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RESULT 26
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A; Recension: S12372
A; Rocelle type: mRNA
A; Residues: 1-128 < TOM>
A; Cross-references: EMBL: X51697
A; R; Mod. M. C.; Gautier, C.; Wolf, C.; Hareuveni, M.; Chambon, P.; Lathe, R. Rybescription: hSP, the domain-duplicated homolog of pS2 protein, is co-expressed with pA; Reference number: S63997
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C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Accession: 153637
R;Jeffrey, G.P.: Oates, P.S.; Wang, T.C.; Babyatsky, M.W.; Brand, S.J.
Gastroenterology 106, 336-345, 1994
A;Title: Spasmolytic polypeptide: a trefoil peptide secreted by rat gastric mucous cells
A;Reference number: 153637; MUID:94131228; PMID:8299900
A;Accession: 153637
A;Status: preliminary; translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                          æ
                                                                                                                                                  spasmolytic protein precursor - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 21-Nov-1993 Hasquence_revision 24-May-1996 #text_change 18-Jun-1999
C;Accession: S12372; S63997
R;Tomasetto, C.; Rio, M.C.; Gautier, C.; Wolf, C.; Hareuveni, M.; Chambon, P.; Lathe, EMBO J. 9, 407-414, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Superfamily: spasmolytic protein; trefoil homology
C; Keywords: duplication; hormone; pancreas
F;1-22/Domain: signal sequence (fragment) #status predicted <SIG>F;23-128/Product: spasmolytic protein #status predicted <MAT>F;30-71/Domain: trefoil homology <TRF2>F;80-120/Domain: trefoil homology <TRF2>F;80-120/Domain: trefoil homology <TRF2>F;80-120/Domain: trefoil homology <TRF2>F;80-126,30-57,41-56,51-68,80-106,90-105,100-117/Disulfide bonds: #status predicted
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A; Molecule type: mRNA
A; Residues: 1-10, V',12-128 <TOW>
A; Cross-references: EMBL:X51697; NID:g54165; PIDN:CAA35994.1; PID:g54166
C; Genetics:
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Best Local Similarity
Matches 5; Conserv
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Cypecies: Listeria Cypecies: C.; Amend, A.; Baquero, F.; Berche, P.; Bloecker
Cypecies: Listeria Cypecies: Comparative Cypecies: Listeria Cypecies: Cypecies
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C;Species: Listeria innocua
C;Date: 27-Nov-2001 #text_change 09-Jul-2004
C;Accession: AD1594
C;Accession: AD1594
C;Accession: AD1594
C;Date: 27-Nov-2001 #text_change 09-Jul-2004
C;Accession: AD1594
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C;Accession: AD1294
C;Accession: AD1204
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C;Accession: AD1594
C;Bonce 294
C;Accession: AD1594
C;Bonce 204
C;Accession: AD1594
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A;Experimental source: strain Clip11262
C;Genetics:
hypothetical coiled-coil protein [imported] - fission yeast (Schizosaccharomyces pombe)
C;Species: Schizosaccharomyces pombe
C;Species: Schizosaccharomyces pombe
C;Species: Ob-Jun-2000 #sequence_revision 09-Jun-2000 #text_change 09-Jul-2004
C;Accession: T50331
R;Lyne, M.; Rajandream, M.A.; Barrell, B.G.; Brown, S.; Harris, D.
A;Reference number: Z25062
A;Accession: T50331
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Rosiques: 1-147 <LYN>
A;Coss-references: UNIPROT:Q9P7P1; EMBL:AL157874; PIDN:CAB75993.1; GSPDB:GN00067; SPDB:A;Genetics: Strain 972h(-); cosmid c1718
A;Genetics: 25062
A;Map position: 2
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hypothetical protein lin1705 [imported] - Listeria innocua (strain Clip11262)
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Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity
Matches 5; Conserv
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A,Status: preliminary
A,Molecule type: DNA
A,Residues: 1-148 «GLA>
A,Cross-references: UNIPROT:Q92C98; GB:AL592022; PIDN:CAC96524.1; PID:g16413766; GSPDB:G
A,Experimental source: strain Clip11262
C,Genetics:
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C.; Ma
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A;Residues: 1-162 <MHI->
A;Cross-references: UNIPROT:09RS54; GB:AE002059; GB:AE000513; NID:g6460070; PIDN:AAF1181
A;Experimental source: strain R1
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C,Species: Xylella fastidiosa
C,Species: Xylella fastidiosa
C,Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
C,Gacession: F82743
R,Anonymous, The Xylella fastidiosa Consortium of the Organization for Nucleotide Sequen Nature 406, 151-157, 2000
Nature 406, 151-157, 2000
A,Fitle: The genome sequence of the plant pathogen Xylella fastidiosa.
A,Reference number: A82515; MUID:20365717; PMID:10910347
A,Note: for a complete list of authors see reference number A59328 below
A,Accession: F82743
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A, Molecule type: DNA
A, Residues: 1-165 < SINA
A, Cross-references: UNIPROT: OPPET1; GB: AE003933; GB: AE003849; NID: G9105863; PIDN: AAF8375
A, Experimental source: strain 9a5c
B, Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; A Briones, M.R.S.; Bueno, M.R.P.; Camargo, L.E.A.; Carraro, D.M.; Carrer, H as-Neto, E.; Docena, C.; El-Dorry, H.; Fracincani, A.P.; Ferraica, A.J.S.
submitted to GenBank, June 2000
J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohm J.D.; Junqueira, M.L.; Kemper, E.L.; Kitajian, J.P.; Krieger, J.E.; Kuramac, E.E.; Laigr chado, M.A.; Madeira, A.M.B.N.; Madeira, H.M.F.; Marino, C.L.; Marques, M.V.; Martins, E.A; Authors: Martins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.N.; Miracca, B.C.; Miyaki, C.Y...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA topology modulation protein FlaR-related protein - Deinococcus radiodurans (strain C;Species: Deinococcus radiodurans C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R1.
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R;White, O.; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A,Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans A,Reference number: A75250; MUID:20036896; PMID:10567266
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                                                                                                                                                                                                                                                                                                         Length 148;
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Pred. No. 1.5e+02;
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100.0%; Pred. No. 1...
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Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
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Tue Oct 26 08:02:25 2004

Query Match

Best Loca Matches

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Gaps

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Cipace: Nethanobacterium thermoautotrophicum (strain Delta H)
Cipace: Nethanobacterium thermoautotrophicum
Cipace: Ob-ec-1997 #sequence_revision O5-Dec-1997 #text_change 16-Aug-2004
Cipacesion: D69061
Rismith, D.R.; Doucette-Stamm, L.A.; Deloughery, C.; Lee, H.; Dubois, J.; Aldredge, T.; F.; Ciu, D.; Spadafora, R.; Vicaire, R.; Wang, Y.; Wierzbowski, J.; Gibson, R.; Jiwani, N.; ki, S.; Church, G.M.; Daniels, C.J.; Mao, J.; Rice, P.; Noelling, J.; Reeve, J.N.
J. Bacteriol. 179, 7135-7155, 1997
A;Title: Complete genome sequence of Methanobacterium thermoautotrophicum Delta H: functi
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A;Residues: 1-192 <MTH>
A;Cross-references: UNIPROT:026249; GB:AE000803; GB:AE000666; NID:g2621179; PIDN:AAB84652
A;Experimental source: strain Delta H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A,Cross-references: UNIPROT:Q29839; EMBL:X89707; NID:g1052702; PIDN:CAA61854.1; PID:g1052
C,Genetics:
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A, Status: preliminary; nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                                                                                                                                         C.Species: Homo sapiens (man)
C.Date: 13-Jan-1996 #sequence_revision 01-Mar-1996 #text_change 09-Jul-2004
C.Dacession: SSB124
R.P.Blasczyk, R.; Lochiger, C.; Wehling, J.
A.Reference number: SSB124
A.Reference number: SSB124
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CiDate: 04-Feb-2000 #sequence_revision 04-Feb-2000 #text_change 09-Jul-2004
CiAccession: T46483
Sibussterhoeft, A.; Lauber, J.; Mewes, H.W.; Gassenhuber, J.; Wiemann, S. submitted to the Protein Sequence Database, January 2000
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A;Start codon: TTG
C;Superfamily: Precorrin-6Y methyltransferase (decarboxylating)
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100.0%; Pred. No. 1.9e+02;
:ive 0; Mismatches 0; Indels
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Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 5; Conservative 0; Mismatches 0;
             Mismatches
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                Conservative
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A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-179 <BLA>
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Best Local Similarity
Matches 5; Conserv
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                                                                        14 MLETK 18
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                2,
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             Matches
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C;Species: Listeria monocytogenes
C;Species: Listeria monocytogenes
C;Species: Listeria monocytogenes
C;Accession: AH1106
R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bloecker.
J; Doninguez-Bernal, G; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, H.
J; Jones, L.M.; Karst, U.
Science 294, 849-852, 2001
A;Authors: Kreft, J; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A.; Ma
A;Title: Comparative genomics of Listeria species
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Accession: AH106
, F.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasak A; Authors: da Silva, A.B.; da Silva, A.M.; Silva Jr., W.A.; da Silvai, R.R.; da Silvai, A.M.; Silva Jr., W.A.; da Silveir M.; Tsuhako, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z A; Reference number: A59328
A; Reference number: A59328
A; Contents: annotation
C; Genetics:
A; Gene: XF0947
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PRESULT 34

PROBABLE Lipoprotein Cj1483c [imported] - Campylobacter jejuni (strain NCTC 11168)

C, Species: Campylobacter jejuni
C, Species: Campylobacter jejuni
C, Species: Campylobacter jejuni
C, Species: Campylobacter jejuni
C, Species: Oampylobacter jejuni
C, Pate: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 09-Jul-2004
R, Parkhill, J, Wren, B.W.; Mungall, K.; Ketley, J.M.; Churcher, C.; Basham, D.; Chillin
R, Parkhill, J, Wren, B.W.; Mungall, K.; Ketley, J.W.; Churcher, C.; Basham, D.; Chillin
Nature 403, 665-668, 2000
A, Title: The genome sequence of the food-borne pathogen Campylobacter jejuni reveals hyp
A, Reference number: A81250; MUD: 20150912; PMID: 10688204
A, Status: preliminary
A, Status: preliminary
A, Molecule type: DNA
A, Molecule type: DNA
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A,Cross-references: UNIPROT:Q9PMH9; GB:AL139078; GB:AL111168; NID:g6968723; PIDN:CAB739C
A,Experimental source: serotype O2, strain NCTC 11168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A Status: preliminary
A;Molecule type: DNA
A;Molecule type: DNA
A;Molecule type: DNA
A;Cross.references: UNIPROT:QBYA99; GB:NC_003210; PIDN:CAD00782.1; PID:g16409620; GSPDB:A;Experimental source: strain EGD-e
C;Genetics:
A;Gene: 1mo0255
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                                                                                                                                                                                                                                                                                           25.0%; Score 5; DB 2; Length 165; ilarity 100.0%; Pred. No. 1.7e+02; Conservative 0; Mismatches 0; Indels
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100.0%; Pred. No. 1.7
tive 0; Mismatches
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Best Local Similarity
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Best Local Similarity
Matches 5; Conserv
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nes 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                        7 WLRCV 11
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C,Accession: E26078; S09916
R;Weston, K.; Barrell, B.G.
W Mol. Biol. 192, 177-208, 1986
A;Title: Sequence of the short unique region, short repeats, and part of the long repeat A;Reference number: A92935; MUID:87169717; PMID:3031311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A Molecule type: DNA
A Molecule type: DNA
A Molecule type: DNA
A Molecule type: DNA
A Molecule type: 1-199 < MBL: X04650; NID: 959801; PIDN: CAB37096.1; PID: 944561.
A Experimental source: strain AD169
Curr. Top. Mis.; Bankier, A.T.; Beck, S.; Bohni, R.; Brown, C.M.; Cerny, R.; Horsnell, T.; B.
Curr. Top. Microbiol. Immunol. 154, 125-169, 1990
A; Title: Analysis of the protein-coding content of the sequence of human cytomegalovirus A; Reference number: S09749; MUID: 90269039; PMID: 2161319
A; Accession: S09916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: genomic RNA
A; Mesidues: 1-195 < IMAL)
A; Cross-references: UNIPROT: P25883; GB:D90192; GB:M58303; NID:g221695; PIDN: BAA14216.1;
A; Experimental source: isolate Japanese S-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A, Experimental source: isolate Japanese S-1
A,Note: note this sequence was submitted to the EMBL Data Library, June 1991
C,Superfamily: hepatitis delta virus large antigen
C,Rewords: core protein
F,2-195/Product: delta large antigen #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RjImāzeki, F.; Omata, M.; Ohto, M.
Nucleic Acids Res. 19, 5439, 1991
A;Title: Complete nucleotide sequence of hepatitis delta virus RNA in Japan.
A;Reference number: S18678; MUID:92020244; PMID:1923832
A;Accession: S18678
                                                                                                                                                                                                                                                    Cispecies: heparitis delta virus
Cispecies: heparitis delta virus
Cispecies: heparitis delta virus
Ciscossion: B16409; B18678
R;Imazeki, F.; Omata, M.; Ohto, M.
J. Virol. 64, 5594-5599, 1990
A;Title: Heterogeneity and evolution rates of delta virus RNA sequences.
A;Ritle: Heterogeneity and evolution rates of delta virus RNA sequences.
A;Reference number: A36409; MUID:91012805; PMID:2214027
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C;Species: human cytomegalovirus, human herpesvirus 5
C;Date: 30-Sep-1989 #sequence_revision 30-Sep-1989 #text_change 09-Jul-2004
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A,Note: this sequence was submitted to the EMBL Data Library, December 1989
C,Genetics:
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                                                                                                                                                                                          delta large antigen - hepatitis delta virus (isolate Japanese S-1)
N;Alternate names: HDag
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                           PRGAP 163
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AH1855
hypothetical protein all0393 [imported] - Nostoc sp. (strain PCC 7120)
C;Species: Nostoc sp. PCC 7120
C;Species: Nostoc sp. PCC 7120
C;Species: Nostoc sp. PCC 7120
C;Date: Nostoc sp. strain PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Jul-2004
C;Accession: AH1855
R;Kaneko, I.; Nakamura, Y.; Wolk, C.P.; Kuritz, I.; Sasamoto, S.; Watanabe, A.; Irriguchi
Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S
DNA Res. 8, 205-213, 2001
A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Ana
A;Reference number: AB1807; MUID:21595285; PMID:11759840
A;Accession: AH1855
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-193 < KURx>
A;Cross-references: UNIPROT:Q8YZR4; GB:BA000019; PIDN:BAB72351.1; PID:g17129738; GSPDB:G
C;Genetics:
A;Gene: all0393
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SAVIDM
delta large antigen - hepatitis delta virus (strain Japanese M-1)
NiAlternate names: HDag
CiSpecies: hepatitis delta virus
Rimazeki, E.; Omata, M.; Obto, M.
J. Virol. 64, 5594-5599, 1990
A; Tile: Heterogeneity and evolution rates of delta virus RNA sequences.
A; Reference number: A36409; MUID: 91012805; PMID: 2214027
A; Residues: 1-195 < INA
A; Cross-references: UNIRROR: PS881; GB: D90190; GB: M58299; NID: 9221691; PIDN: BAA14214.1;
C; Superfamily: hepatitis delta virus large antigen
C; Keywords: core protein
F; 2-195/Product: delta large antigen #status predicted < MAT>
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                                                                                                                                                                                                                                                                                                                            Length 192;
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                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                    A; Accession: T46483
A; Status: preliminary
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Cxoss-references: UNIPROT: Q969U6; EMBL: AL137631
A; Experimental source: adult testis; clone DKFZp434B205
A; Note: DKFZp434B205.1
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Pred. No.
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100.0%; Pre
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A; Reference number: Z23035
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Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
Matches 5; Conserv
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Cispeciaes: sugar beet yellows virus, SBYV
Cibate: 07-May-1993 #sequence_revision 07-May-1993 #text_change 08-Oct-1999
Cipacession: $28710
Cipaces
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R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, S.; Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, S.; Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S. Alathors: Sqares, R.; Sulston, J.B.; Taylor, K.; Whitehead, S.; Barrell, B.G. A;Title: Deciphering the biology of Mycobacterium tuberculosis from the complete genome s A;Reference number: A70500; MuID:98295987; PMID:9634230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPROT:053504; GB:AL021957; GB:AL123456; NID:g3242293; PIDN:CAA17474
A;Experimental source: strain H37Rv
C;Genetics:
A;Gene: Rv2170
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                                                                                                                                            C.Species: Mycobacterium tuberculosis
C.Spacie: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 09-Jul-2004
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                                                                                                       hypothetical protein Rv2170 - Mycobacterium tuberculosis (strain H37RV)
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Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39 APMWL 43
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R.Nolling, J., Breton, G.; Cmelchenko, M.V.; Markarova, K.S.; Zeng, Q.; Gibson, R.; Lee, J. Bacteriol. 183, 4823-4838, 2001
A.Title: Genome Sequence and Comparative Analysis of the Solvent-Producing Bacterium Clc A;Reference number: A96900; MUID:21359325, PMID:21359325
A.Accession: A97342
A,Ancession: A97342
A,Anchecule type: DNA
A,Residues: 1-202 ckUR>
A,Residues: 1-202 ckUR>
A,Cross-references: UNIPROT:Q97D79; GB:AE001437; PIDN:AAK81524.1; PID:g15026699; GSPDB:G.Genetics: A;Genetics: Clostridium acetobutylicum ATCC824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-202 <WHI.>
A;Residues: 1-202 <WHI.>
A;Cross-references: UNIPROT: Q28679; GB:L26979; NID:g469064; PIDN:AAA31193.1; PID:g469065
C;Superfamily: lipocalin; lipocalin homology
F;42-188/Domain: lipocalin homology <LIP>
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C:Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C;Date: 146688
R;White, R.V.; Kaufman, K.W.; Letson, C.S.; Platteborze, P.L.; Sodetz, J.M.
J. Immunol. 152, 2501-2508, 1994
A;Title: Characterization of rabbit complement component C8: Functional evidence for A;Reference number: 146686; MUID:94179833; PMID:7510745
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0
A;Gene: HQLF2
Csuperfamily: cytomegalovirus HQLF2 protein
C;Keywords: glycoprotein; transmembrane protein
F;1-25/Domain: signal sequence #status predicted <SIG>
F;2-199/Product: hypothetical protein US2 #status predicted <MAT>
F;61-186/Domain: transmembrane #status predicted <TMM>
F;68/Binding site: carbohydrate (Asn) (covalent) #status predicted
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                                                                                                                                                                                                                                                                                                                                                                                                     25.0%; Score 5; DB 1; Length 199; 100.0%; Pred. No. 1.9e+02; ive 0; Mismatches 0; Indels
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26 PRGAP 30
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Conserved hypothetical protein [imported] - Sulfolobus solfataricus
C;Species: Sulfolobus solfataricus
C;Species: Sulfolobus solfataricus
C;Species: Sulfolobus solfataricus
C;Date: 2-4-May-2001 #sequence_revision 24-May-2001 #text_change 09-Jul-2004
C;Accession: B90222
R;She, Q.; Singh, R.K.; Confalonieri, F.; Zivanovic, Y.; Allard, G.; Awayez, M.J.; Chan-V Jong, I.; Jeffries, A.C.; Kozera, C.J.; Medina, N.; Peng, X.; Thi-Ngoc, H.P.; Redder, P arrett, R.A.; Ragan, M.A.; Sensen, C.W.; Van der Oost, J.
submitted to GenBank, April 2001
A;Description: Sulfolobus solfataricus complete genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Residues: 1-23 <KUR>
A;Cesidues: 1-233 <KUR>
A;Crordues: 1-213 <KUR>
C;Genetics:
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A;Cross-references: UNIPROT:Q19917; EMBL:U58742; PIDN:AAB36858.1; GSPDB:GN00028; CESP:F3
A;Experimental source: strain Bristol N2; clone F31A3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hypothetical protein F31A3.4 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Accession: T25697
R;Murray, J.; Le, T.T.
submitted to the EMBL Data Library, May 1996
A;Description: The sequence of C. elegans cosmid F31A3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hypothetical protein F09E8.1 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Pate: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T20657
R;Percy, C.
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100.0%; Pred. No. 2.3e+02;
.ive 0; Mismatches 0; Indels
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A;Residues: 1-240 <WIL>
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A,Status: preliminary; translated from GB/EMBL/DDBJ
A,Molecule type: DNA
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A,Status: preliminary
A,Molecule type: DNA
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A, Map position: X
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                                                                                                                                                                                                                                                                        Cyspecies: Sinorhizobium meliloti
Ryfrinan, T.M.; Weidner, S.; Wong, K.; Buhrmester, J.; Chain, P.; Vorholter, F.J.; Hernan
AyTelle: The Complete sequence of the 1,683-kb psymB megaplasmid from the N2-fixing end
AyStetus: preliminary
AyReterence number: A95842; MUID:21396508; PMID:11481431
AyStetus: preliminary
AyStetus: preliminary
AyStetus: preliminary
AyReterences: UNIPROT: Q92W01; GB:AL591985; PIDN:CAC48946.1; PID:g15140431; GSPDB:G
AyStetus: preliminary
AyReterences: UNIPROT: Q92W01; GB:AL591985; PIDN:CAC48946.1; PID:g15140431; GSPDB:G
AyExperimental source: strain 1021, megaplasmid psymB
RyGalbert, F.; Finan, T.M.; Long, S.R.; Puhler, A.; Abola, P.; Ampe, F.; Barloy-Hubler, Pela, D.; Chain, P.; Cowie, A.; Davis, R.W.; Dreano, S.; Federspiel, N.A.; Fisher, R.F.;
L.; Hyman, R.W.; Jones, T.
Science 293, 688-672, 2001
A;Authors: Kahn, D.; Kahn, M.L.; Kahman, S.; Keating, D.H.; Kiss, E.; Komp, C.; Lelaure, hebault, P.; Vandenbol, M.; Vorholter, F.J.; Weidner, S.; Wells, D.H.; Wong, K.; Yeh, K.; Chenents: annotation
A;Authors: AyReference number: A96039; MUID:21368234; PMID:11474104
A;Contents: annotation
A;Authors substances
A;Contents: annotation
A;Contents: annotation
A;Contents: annotation
A;Contents: Agame and Aga
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Hypothetical protein Cj0122 [imported] - Campylobacter jejuni (strain NCTC 11168)

C;Species: Campylobacter jejuni
C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 09-Jul-2004

C;Accession: B81429

R;ParkHill, J.; Wren, B.W.; Mungall, K.; Ketley, J.M.; Churcher, C.; Basham, D.; Chillin C.W.; Quail, M.; Rajandream, M.A.; Rutherford, K.M.; VanVliet, A.; Whitehead, S.; Barrel
Nature 403, 665-668, 2000

A;Title: The genome sequence of the food-borne pathogen Campylobacter jejuni reveals hyp
A;Reference number: A81250; MUD:20150912; PMID:10688204

A;Reference number: A81250; MUD:20150912; PMID:10688204

A;Residues: Drelininary

A;Molecule type: DNA

A;Residues: 1-229 <PAR>
A;Residues: Universe: Serotype O2, strain NCTC 11168

C;Genetics:
A;Genetics:
A;Genetics:
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   0;
   Gaps
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   0;
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Pred. No. 2.2e+02;
0; Mismatches 0; Indels
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   Indels
   ..
0
   Mismatches
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100.0%; Pre
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Best Local Similarity 100.
Matches 5; Conservative
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   5; Conservative
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                               54 PRGAP 58
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                                                               PRGAP 5
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A;Genome: plasmid
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Matches
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A; Reference number: A93388; MUID:87115834; PMID:3808053
A; Reference number: A93388; MUID:87115834; PMID:3808053
A; Contents: annotation; animal lectin domain homology
C; Comment: Pulmonary surfactant is a complex of phospholipids and proteins that lowers the C; Comment: This protein is a sialoglycoprotein synthesized by alveolar type II cells. It pendent on the presence of calcium ions.
C; Superfamily: mannose-binding lectin; C-type lectin homology
C; Reywords: alveolar proteinosis; calcium; disulfide bond; gaseous exchange; hydroxyprolifically. P:1-17/Domain: signal sequence #status predicted <SIG>F;18-102/Region: Collagen-like
F;18-102/Region: Collagen-like
F;20.207/Binding site: carbobydrate (Asn) (covalent) #status predicted
F;30/Modified site: 4-hydroxyproline (Pro) #status experimental
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R;Bevan, M;K;Weichselgartner, M;Fartmann, B;Granderath, K;Dauner, D;Herzl, A;Ne
submitted to the Protein Sequence Database, October 1998
A;Reference number: Z15415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C, Accession: C70823
R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, S.; Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, S.; Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S. Alathors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G. A;Title: Deciphering the biology of Mycobacterium tuberculosis from the complete genome & A;Reference number: A70500; MuID:98295897; PMID:9634230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Status: preliminary; nucleic acid sequence not shown; translation not shown A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hypothetical protein F28A23.120 - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 23-Apr-1999 #sequence_revision 23-Apr-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein Rv0736 - Mycobacterium tuberculosis (strain H37RV)
C;Species: Mycobacterium tuberculosis
C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 09-Jul-2004
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A,Experimental source: cultivar Columbia; BAC clone F28A23
   A; Reference number: A60142; MUID:86159848; PMID:3006781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Map position: 4
A;Introns: 71/3; 101/1; 122/3; 139/1; 154/2; 219/2
A;Note: F28A23.120
                                                                        A;Molecule type: protein
X,Residues: 24-34;95-101,'X',103-108 <ROS>
R;Patthy, L.
Nature 325, 490, 1987
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Best Local Similarity 100.v..
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Best Local Similarity 100.0
Matches 5, Conservative
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A; Molecule type: DNA
                                A; Accession: A60142
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NyAlternate names: pulmonary surfactant 32% apoprotein; pulmonary surfactant associated
C;Species: Canis lupus familiaris (dog)
C;Date: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change 16-Jul-1999
C;Accession: A25296; A61227; Ā60142
R;Benson, B.; Hawgood, S.; Schilling, J.; Clements, J.; Damm, D.; Cordell, B.; White, R.
Proc. Natl. Acad. Sci. U.S.A. 82, 6379-6383, 1985
A;Title: Structure of canine pulmonary surfactant apoprotein: cDNA and complete amino ac
A;Reference number: A25296; MUID:86016705; PMID:3863100
A;Rocession: A25296
A;Molecule type: mRNA
A;Residues: 1-248 ABBN>
A;Note: the authors translated the codon TTG for residue 60 as Pro
A;Note: part of the sequence, including the amino end of the mature protein, was confirm
R;Liau, D.F.; Ryan, S.F.
Chem. Phys. Lipids 59, 29-38, 1991
A;Title: Purification of surfactant protein A from dog lung by reconstitution with surfa
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A,Residues: 18-32 < LIA>
R,Residues: 18-32 < LIA>
R,Residues: 18-32 < LIA>
B,CORDim. Biophys. Morta 870, 267-278, 1986
A,Title: Purification of canine surfactant-associated glycoproteins A. Identification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Accession: B89833
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-247 <KUR>
A;Cross-references: UNIPROT:Q99VY2; GB:BA000018; PID:g13700524; PIDN:BAB41821.1; GSPDB:G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Species: Staphylococcus aureus
C;Species: O-May-2001 #sequence_revision 10-May-2001 #text_change 16-Aug-2004
C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 16-Aug-2004
C;Accession: B89833
R;Kuroda, M; Obta, T.; Uchiyama, I.; Baba, T.; Yuzawa, H.; Kobayashi, I.; Cui, L.; Oguc ma, A.; Mizutani-Ui, Y.; Kobayashi, N.; Sawano, T.; Inoue, R.; Kaito, C.; Sekimizu, K.; C.; Shiba, T.; Hattori, M.; Ogasawara, N.; Hayashi, H.; Hiramatsu, K.
Lancet 357, 1225-1240, 2001
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A, Cross-references: UNIPROT: Q19268; EMBL: Z73896; PIDN: CAA98056.1; GSPDB: GN00022; CESP: Fd
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hypothetical protein SA0589 [imported] - Staphylococcus aureus (strain N315)
                                                                                                                                                                                                                                                                                                                  Gaps
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C,Superfamily: ATP-binding cassette homology
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A;Introns: 18/1; 54/1; 97/1; 149/1
                                clone F09E8
                                    A; Experimental source:
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                                                                           C; Genetics:
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Rigoodner, B.; Hinkle, G.; Gattung, S.; Miller, N.; Blanchard, M.; Qurollo, B.; Goldman, A.; Liu, F.; Wollam, C.; Allinger, M.; Doughty, D.; Scott, C.; Lappas, C.; Markelz, B.; Science 294, 2323-2328, 2001
A;Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrobacterium tum A;Reference number: A97359; MUID:21608551; PMID:11743194
                                                                                                                                                                                                                                                                                                                                                                                             A,Molecule type: DNA
A,Residues: 1-254 <KUR>
A,Cross-references: UNIPROT:Q8U9P1; GB:AE007870; PIDN:AAK89717.1; PID:g15159631; GSPDB:G
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A;Cross-references: UNIPROT:Q19918; EMBL:U58742; PIDN:AAB36855.1; GSPDB:GN00028; CESP:F3
A;Experimental source: strain Bristol N2; clone F31A3
C;Genetics:
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C;Species: Bacillus halodurans
C;Date: O1-Dec-2000 #sequence_revision O1-Dec-2000 #text_change 09-Jul-2004
C;Accession: H8396
R;Takani, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; Hira Nucleic Acids Res. 28, 4317-4331, 2000
A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and A;Reference number: A83650; MUID:20512582; PMID:11058132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Map position: linear chromosome
C;Superfamily: type II thioesterase, NRPS/PKS/S-FAS type; oleoyl-[acyl-carrier-protein]
                                                 - Agrobacterium tumefaciens (strain C58, Cereon)
                             nikP2 protein (AJ250581) [imported] - Agrobacterium tumefaciens (strain C58, C;Species: Agrobacterium tumefaciens C;Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 12-Jul-2004 C;Accession: C98274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hypothetical protein F31A3.2 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Accession: T2698
R;Murray, J; Le, T.T.
submitted to the EMBL Data Library, May 1996
A;Description: The sequence of C. elegans cosmid F31A3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Introns: 23/3; 80/2; 155/2
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lyosaterase - Streptomyces fradiae (strain T59235)
C;Species: Streptomyces fradiae
A;Variety: strain T59235
C;Species: Streptomyces fradiae
A;Variety: strain T59235
C;Date: 15-Feb-1996 #sequence_revision 01-Mar-1996 #text_change 12-Jul-2004
C;Accession: S49055
R;Merson-Davies, L.A.; Cundliffe, E.
Mol. Microbiol. 13, 349-355; M919.
A;Ritle: Analysis of five tylosin biosynthetic genes from the tyIIBA region of the Strep A;Reference number: S49051; MUID: 95075319; PMID: 7984112
A;Reference number: S49055
A;Status: preliminary; nucleic acid sequence not shown; translation not shown A;Molecule type: DNA
A;Residues: 1-253 cARRS
A;Catus: preliminary; nucleic acid sequence not shown; translation not shown A;Molecule type: DNA
A;Residues: 1-253 cARRS
A;Cross-references: UNIPROT: Q54145; EMBL: U08223; NID: 96849140; PIDN: AAA21345.1; PID: 9473
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, March 1994
C;Superfamily: type II thioesterase, NRPS/PKS/S-FAS type; oleoy1-[acy1-carrier-protein]
F;16-232/Domain: oleoy1-[acy1-carrier-protein]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dypothetical protein SS01215 [imported] - Sulfolobus solfataricus C;Species: Sulfolobus solfataricus C;Species: Sulfolobus solfataricus C;Species: Sulfolobus solfataricus C;Accession: G90275
R;She, Q; Singh, R.K.; Confalonieri, F; Zivanovic, Y; Allard, G; Awayez, M.J.; Chandong, I.; Jefffries, A.C.; Kozera, C.J.; Medina, N.; Peng, X.; Thi-Ngoc, H.P.; Redder, F Submitted to GenBank, April 2001
A;Description: Sulfolobus solfataricus complete genome.
A;Reference number: A99139
A;Reference number: A99139
A;Reference number: A99139
A;Reference number: A99139
A;Residues: 1-253 «KUR»
A;Residues: 1-253 «KUR»
A;Residues: 1-253 «KUR»
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
A;Cross-references: UNIPROT:053799; GB:AL021958; GB:AL123456; NID:g3261536; PIDN:CAA1750
A;Experimental source: strain H37Rv
C;Genetics:
A;Gene: Rv0736
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                                                                                                                                                                    25.0%; Score 5; DB 2; Length 250; 100.0%; Pred. No. 2.3e+02; ive 0; Mismatches 0; Indels
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Best Local Similarity 100.0
Matches 5; Conservative
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Best Local Similarity 100.
Matches 5; Conservative
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Best Local Similarity
Matches 5; Conserv
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C;Accession: C68854

R;Kunst, F:; Ogasawara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; Berterc C;Accession: C68854

R;Kunst, F:; Ogasawara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; Berterc C; Bron, S.; Broullet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.; Choi A.; Ehrlich, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrari, E. Nature 390, 249-256, 1997

A;Authors: Foulger, D.; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Gallert iech, J.; Harwood, C.R.; Henaut, A.; Hilbert, H.; Holsappel, S.; Hosono, S.; Hullo, M.F.; Koetter, P.; Koningstein, G.; Krogh, S.; Kumano, M.; Kurita, K.; Lapidus, A.; Lardinois, A;Authors: Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Masuda, S.; Maueel, Y. M.; Ogawa, K.; Ogiwara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Portetelle, Rieger, M.; Rivolta, C.; Rocha, E.; Roche, B.; Rose, M.; Sadaie, Y.; Sato, T.; Scanlon, A;Authors: Schleich, S.; Schroeter, R.; Scoffone, F.; Sekiguchi, J.; Sato, T.; Scanlon, A;Authors: Yoshikawa, H.F.; Zumatecin, B.; Yamane, K.; Yasunoto, K.; Yata, K.; Yata, K.; Yata, K.; Yata, K.; Yata, K.; Yata, K.; Yatus, R.; Yatuler, P.; A;Acterence number: A69580; MUID:98044033; PMID:9384377

A;Status: preliminary; nucleic acid sequence not shown; translation not shown

A;Nobecule rype: DMA.
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                                                                                                                                                                                                                                                       noid protein - Rhizobium meliloti
C;Species: Rhizobium meliloti
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 08-Oct-1999
C;Accession: S16563
R;Baev, N.; Endre, G.; Petrovics, G.; Banfalvi, Z.; Kondorosi, A.
Mol. Gen. Genet. 228, 113-124, 1991
A;Title: Six nodulation genes of nod box locus 4 in Rhizobium meliloti are involved in A;Reference number: S16561; MUID:91360053; PMID:1909418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  conserved hypothetical protein yjqC - Bacillus subtilis
C;Species: Bacillus subtilis
C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 09-Jul-2004
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C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
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100.0%; Pred. No. 2.5e+02;
tive 0; Mismatches 0; Indels
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Best Local Similarity 100.(
Matches 5; Conservative
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A;Molecule type: DNA
A;Residues: 1-277 <BAE>
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wes 5; Conserv
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A;Cross-references: UNIPROT:Q9KA34; GB:AP001515; GB:BA000004; NID:g10174886; FIDN:BAB061
A;Experimental source: strain C-125
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Species: Actinobacillus actinomycetemcomitans
C;Species: Actinobacillus actinomycetemcomitans
C;Date: 22-Jan-1399 #sequence_revision 22-Jan-1399 #text_change 09-Jul-2004
C;Date: 22-Jan-1399 #sequence_revision 22-Jan-1399 #text_change 09-Jul-2004
C;Jacession: TOBL14
R;Nakano, Y.; Voshida, Y.; Yamashita, Y.; Koga, T.
Biochim. Biophys. Acta 1442, 409-414, 1998
A;Title: A gene cluster for 6-deoxy-L-talan synthesis in Actinobacillus actinomycetemcom A;Title: A gene cluster for 6-deoxy-L-talan synthesis in Actinobacillus actinomycetemcom A;Accession: T00114
A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Residues: 1-267 <NAX>
A;Cross-references: UNIPROT:O66261; EMBL:AB010415; NID:g3132248; PIDN:BAA28143.1; PID:g3
A;Experimental source: strain NCTC 9710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Description: catalyzes degradation of double-stranded DNA; removes damaged DNA at cytc
                                                                                                                                                                                                                                                                                                                                                                                               ó;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
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C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: 15-Oct-1999 #text_change 15-Oct-1999
C;Accession: T21429
R;Barlow, K.
R;Barlow,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                exodeoxyribonuclease III (EC 3.1.11.2) - Actinobacillus actinomycetemcomitans
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                Query Match 25.0%; Score 5; DB 2; Length 266; Best Local Similarity 100.0%; Pred. No. 2.5e+02; Matches 5; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; Superfamily: exodeoxyribonuclease III
C; Keywords: DNA repair; hydrolase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N;Alternate names: deoxynuclease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5; Conservative
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 LETKF 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Map position: 2
                                                                                                                                                                                                                   A; Gene: fliH
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Gaps 0

Length 284; 0; Indels

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A,Status: preliminary; translated from GB/EMBL/DDBJ
A,Molecule type: DNA
A,Residues: 1-296 <WIL>
A,Residues: UNIPROT: Q22389; EMBL: Z54237; PIDN: CAA90989.1; GSPDB: GN00022; CESP:TI
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A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Asropyr A;Reference number: A72450; MUID:99310339; PMID:10382966
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A,Residues: 1-304 <XAM>
A,Cross-references: UNIPROT: 09YFP8; DDBJ: AP000058; NID: 95103388; PIDN: BAA79113.1; PID: d1
A,Experimental source: strain K1
C,Genetics:
A,Gene: APE0201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hypothetical protein TilB7.3 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accesion: T24827
R;Gardher, A.
Submitted to the EMBL Data Library, September 1995
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C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jul-2004
C;Accession: G72776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25.0%; Score 5; DB 2; Length 296; 100.0%; Pred. No. 2.7e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein APE0201 - Aeropyrum pernix (strain K1)
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                                                                                                          25.0%; Score 5; DB 2; Lei 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0;
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Best Local Similarity 100.0%; Pred. No. 2.7
Matches 5; Conservative 0; Mismatches
                       A; Introns: 60/3; 104/3; 143/1; 180/3; 255/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Experimental source: clone TilB7
                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5; Conservative
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A; Introns: 45/3; 111/1; 270/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Reference number: Z19940
A;Accession: T24827
                                                                Query Match
Best Local Similarity
'Loc 5; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                             180 OMLET 184
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                                                                                                                                                                                                                                                                                               OMLET 17
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A, Molecule type: DNA
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B70745
hypothetical protein Rv0498 - Mycobacterium tuberculosis (strain H37RV)
C;Species: Mycobacterium tuberculosis
C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 09-Jul-2004
C;Accession: B70745
R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, S.; Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, S.; Rajantream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S.
Nature 393, 537-544, 1998
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, R.; Whitehead, S.; Barrell, B.G.
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A;Authors: Sqares, R.; Sulston, J.E.; Taylor, R.; Whitehead, S.; Barrell, B.G.
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, R.; Whitehead, S.; Barrell, B.G.
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, R.; Whitehead, S.; Barrell, B.G.
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, R.; Whitehead, S.; Barrell, B.G.
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, R.; Whitehead, S.; Barrell, B.G.
A;Authors: Rouges of Mulp:98295987; PMID:9634230
A;Authors: Rouges of Mulp:98295987; PMID:9634230
A;Authors: L. 280 ccol.
A;Authors: R. 280 ccol.
A;A
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C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: T2501
B;Rcsshaw, J.
R;Rershaw, J.
R;Rershaw,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
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C;Accession: T27610
R;Du, Z.
submitted to the EMBL Data Library, November 1995
A;Description: The sequence of C. elegans cosmid ZC477.
A;Reference number: Z20392
A;Accession: T27610
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-278 «DUZ>
A;Cross-references: EMBL:U40802; PIDN:AAA81511.1; CESP:ZC477.8
C;Genetics: CESP:ZC477.8
A;Introns: 77/1
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100.0%; Pred. No. 2.5e+02;
ive 0; Mismatches 0; Indels
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Best Local Similarity 100.0
Matches 5; Conservative
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Best Local Similarity
Matches 5; Conserv
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DB 2; Length 304; . 2.7e+02; ches 0; Indels

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C, Accession: G7110

R, Kawarabayasi, Y.; Sawada, M.; Horikawa, H.; Haikawa, Y.; Hino, Y.; Yamamoto, S.; Sekine
M.; Ohfuku, Y.; Punahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Kushida, N.; Oguchi,
DNA Res. 5, 55-76, 1998
A,Title: Complete sequence and gene organization of the genome of a hyper-thermophilic an
A,Reference number: A71000, MUID:98344137; PMID:9679194
A,Accession: G71110
A,Status: preliminary; nucleic acid sequence not shown; translation not shown
A,Rolecule type: DNA
A,Residues: 1-308 < KAW>
A,Residues: 1-308 < KAW>
A,Residues: UNIPROT:058388; GB:AP000003; NID:93236130; PIDN:BAA29745.1; PID:g325;
A,Roberimental source: strain OT3
A,Rocession replaces an interim accession for a sequence replaced by GenBank
A,Genetics:
A,Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     probable 35 kDa ribonuclease H [imported] - Neurospora crassa
NiAlternate names: protein B3E4.40
C;Spers: Neurospora crassa
C;Date: 02-Unn-2000 #sequence_revision 02-Jun-2000 #text_change 09-Jul-2004
C;Accession: T49591
S;Schulte, U.; Aign, V.; Hoheisel, J.; Brandt, P.; Fartmann, B.; Holland, R.; Nyakatura, submitted to the Protein Sequence Database, May 2000
A;Reference number: Z25022
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A;Experimental source: BAC clone B3E4; strain OR74A
C;Genetics:
A;Genetics:
A;Genetics:
A;Agn postion: 6
A;Introns: 223/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hypothetical protein PH0654 - Pyrococcus horikoshii
C;Species: Pyrococcus horikoshii
C;Date: 14-Aug-1998 #sequence_revision 14-Aug-1998 #text_change 12-Jul-2004
                                                                                                                                                                                                                       Gaps
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                                                                                                           25.0%; Score 5; DB 2; Length 308;
100.0%; Pred. No. 2.8e+02;
tive 0; Mismatches 0; Indels
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               C; Superfamily: Pyrococcus abyssi hypothetical protein PAB1459
                                                                                                                                                                                                            5; Conservative
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                                                                                                                                               Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
Matches 5; Conserv
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A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-317 <SCH>
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                              A;Reference number: 219345
A;Accession: T20906
A;Accession: T20906
A;Accession: T20906
A;Accession: Day
A;Residues: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-305 <WIL>
A;Residues: 1-30
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Cyperage: Pyrococcus abyses:
Cyperage: Pyrococcus abyses:
Cyperage: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jul-2004
Cyperage: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jul-2004
Cyperage: Cyp
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A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Ana A;Reference number: AB1807; MUID:21595285; PMID:11759840
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A;Experimental source: strain PCC 7120
C;Genetics:
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C;Species: Nostoc sp. PCC 7120
S;Note: Nostoc sp. ptc 7120 is a synonym of Anabaena sp. strain PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Jul-2004
C;Accession: AD2202
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C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
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Pred. No. 2.7e+02;
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                                        C,Accession: T20906
R,McMurray, A.
submitted to the EMBL Data Library, November 1996
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Best Local Similarity 100.0%; Pred. No. 2.7
Matches 5; Conservative 0; Mismatches
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A; Introns: 27/3; 49/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Gene: CESP:F14F7.1
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hypothetical protein Y44E3A.5 - Caenorhabditis elegans
C; Species: Caenorhabditis elegans
C; Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 09-Jul-2004
C; Accession: T33845
R; Woessner, J; Graves, T; Keppler, D.
A; Reference number: 221422
A; Reference number: 221422
A; Reference number: 231845
A; Reterence number: 21422
A; Reterence number: 21423
A; Reterence number: 2142
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Q87ari xylella fas Q7s5v2 neurospora Q611j1 photobacter Cag21837 photobact Q9kvu5 vibrio chol

Q8pg22 xanthomonas Q8pg41 xanthomonas Q6neg6 neurospora Caf06276 neurospora Q9bxr5 potorous tr Q95u34 drosophila P56095 kluyveromyo

candida gla fusobacteri

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caenorhabdi caenorhabdi trypanosoma bacteroides homo sapien myxococcus caenorhabdi rabies viru viru

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07p394 08rgc0 093325 093325 08r180 08r180 09upz6 07rcm2 08rbd6 068rbd6 068rbd6

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Q8r7q4 Q6£k03

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Q80ke7 Q80ke9

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O9iwc4 Q9iwc5 O9qd10 Q9qd11

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CAG21837
RSMB_VIBCH
RSMB_XANAC
RSMB_XANCP
 RSMB_XYLFT
Q7S5<u>V</u>2
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AP1_KLULA
Q8R7Q4
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Caf06276
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Q8RGC0
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Q8STF6
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Q83SX5
Q80KE5
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Q80KF2
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QB 0 KGB
QB 0 KH 1
QB 0 KH 1
QB 0 KK 1
QB 0 KK 2
QB 0 KK 3
QB 0 KK 3
QB 0 KK 7
QB 0 KK 7
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Q80KF5
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Q80KF8
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Q80KG1
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Q80KG4
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P73223 synechocyst
O79428 fusobacteri
O60449 bacillus th
Q601820 bacillus an
Aas40668 bacillus
Aat30974 bacillus
Q609X7 rattus norv
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Aah60541 rattus no
Aah70183 homo sapi
Q8xmi8 clostridium
Q9kd93 bacillus ha
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Q9pev0 xylella fas
Q8ddes vibrio vuln
Q7mgk4 vibrio vuln
Q87kd3 vibrio para
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08k581 rattus norv
Cag33216 homo sapi
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                                                                    October 26, 2004, 06:48:06; Search time 91.5 Seconds (without alignments) 125.765 Million cell updates/sec
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         GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
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TXN9_BOVIN
Q8TB70
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TXN9_HUMAN
TXN9_MOUSE
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AROE BACHD
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RSMB_VIBVU
RSMB_VIBVY
RSMB_VIBPA
                                                 protein search, using sw model
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1: uniprot_sprot:*
2: uniprot_trembl:*
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                                                                                                                                                                                                                                                     seq length: 0 seq length: 2000000000
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ALIGNMENTS

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InterPro; IPR006662; Thiored.
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                                                                                   SEQUENCE 179 AA;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APACD protein.
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01-JUN-2002
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"Bovine ATP binding protein.";
"Submitted (OCT-1997) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: Belongs to the UPF0071 family. Some similarity to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                             MEDLINE=22206494; PubMed=12218036; MEDLINE=22206494; PubMed=12218036; Pleischmann R.D., Alland D., Eisen J.A., Carpenter L., White O., Pleischmann R.D., DeBoy R.T., Dodson R.J., Gwinn M.L., Haft D.H., Hickey E.K., Kolonay J.F., Nelson W.C., Umayam L.A., Ermolaeva M.D., Salzberg S.L., Delcher A., Utterback T.R., Weidman J.P., Khouri H.M. Fraser C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Whole-genome comparison of Mycobacterium tuberculosis clinical and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-JUL-1999 (Rel. 38, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
01-CCT-2004 (Rel. 45, Last annotation update)
Thioredoxin domain containing protein 9 (Protein 1-4) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .,
                                                                                                                                                                                                                     Mycobacterium tuberculosis.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Mycobacteriaceae; Mycobacterium.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein.
SEQUENCE 82 AA; 8995 MW; C46009E4E66DC09E CRC64;
                                                                                                                                   01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-WAR-2002 (TrEMBLER. 20, Last annotation update)
Hypothetical protein MT2341.
OrderedLocusNames=MT2341;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35.0%; Score 7; DB 2;
100.0%; Pred. No. 3.1;
iive 0; Mismatches
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                                                                    82 AA
                                                                                                               Created)
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                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  laboratóry strains.";
J. Bacteriol. 184:5479-5490(2002).
EMBL; AE007077; AAK46625.1; -.
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Bos taurus (Bovine).
                                                                                                            (TrEMBLrel. 20,
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Best Local Similarity 100.v
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TXN9 BOVIN
TXN9 BOVIN
AC 018883;
DT 15-UUL-
DT 15-UUL-
DT 01-OCT-
DB Thioree
CB Boxinae TX
OC TX

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                        RESULT 1
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TISSUE=Bone marrow;

MEDLINE=22386257; PubMed=12477932;

MEDLINE=22386257; PubMed=12477932;

Rausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Rausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A platchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Rapleton M.J., Usdain T.B., Toshiyuki S., Carninci P., Prange C.,

Rana S.A., McDwan D.J., McKernan K.J., Maramson R.D., Mullahy S.J.,

Rana S.A., McDwan D.J., McKernan K.J., Maramson R.D., Mullahy S.J.,

Rana S.A., McIn D.W., Sodersten B.J., Lu X., Gibbs R.A.,

Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Rillalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Rahkesley R.W., Touchman M., Madan A., Rodrigues S., Sanchez A.,

Rahkesley R.W., Touchman J.W., Green B.D., Dickson M.C.,

Rak Rizyunski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

Jones S.C., Marra M.A.;

Jones S.J., Marra M.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                   0;
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Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
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188 AA; 22199 MW; B375C22E69DF6523 CRC64;
                                                                                          21051 MW; 6873189499AD494C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30.0%; Score 6; DB 2;
100.0%; Pred. No. 82;
ative 0; Mismatches
                                                                                                                                              DB 1;
                                                                                                                                            30.0%; Score 6; DB 1, 100.0%; Pred. No. 79; iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                           188 AA
InterPro; IPR006663; Thioredox_dom2.
Pfam; PF00085; Thioredoxin; 1.
NON TER 1 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-2002 (TrEMBLrel. 21,
01-JUN-2002 (TrEMBLrel. 21,
01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and mouse cDNA sequences."
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                                                                                                                                                 Query Match 30.0
Best Local Similarity 100.
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
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Shiosaka T.;
 RESULT 6
TXN9_HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                           "Cloning of the trkAH gene cluster and characterization of the Trk Kuptaniza T., Yamamuro N., Stumpe S., Unemoto T., Bakker B.P.;
"Cloning of the trkAH gene cluster and characterization of the Trk Kuptace system of Vibrio alginolyticus.";
Microbiology 144:2281-2289(1998).
EMBL; D86411; BAA31226.1;
G0; G0:0003723; F:RNA binding; IEA.
G0; G0:0003753; F:RNA binding; IEA.
InterPro; IPR001678; Fmu NOL1/Nop2p.
InterPro; IPR006027; NusB.
InterPro; IPR006077; NusB.region.
Pfam; PF01189; Nol1 Np2_Fmu; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Boerlin P., Burnens A.P., Frey J., Kuhnert P., Nicolet J.; "Molecular epidemiology and genetic linkage of macrolide and aminoglycoside resistance in Staphylococcus intermedius of canine
                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                   Vibrio alginolyticus.
Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales;
Vibrionaceae; Vibrio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30.0%; Score 6; DB 2; Length 224; 100.0%; Pred. No. 96; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                           DB 2; Length 211;
                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vet. Microbiol. 79:155-169(2001).
EMBL; AF299292; AAG42229.1; -.
SEQUENCE 224 AA; 26309 MW; C0E3400DDC9B8F1D CRC64;
                                                                                                                                                                                                                                                                              ProDom; PD005242; NusB region; 1.
SEQUENCE 211 AA; 24135 MW; 2B38B568BA78B5C6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                   01-WAR-2001 (TrEMBLrel. 16, Created)
01-WAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
                                               Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Staphylococcus intermedius.
Bacteria, Firmicutes, Bacillales, Staphylococcus.
NCBI_TaxID=1285;
                                                                                                                                                                                                                                                                                                                                                                                                                    224 AA.
                    211 AA.
                                                                                                                                                                                                                                                                                                         30.0%; Score 6; DB 2;
100.0%; Pred. No. 91;
cive 0; Mismatches
                                      Created)
                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=MLS-2;
MEDLINE=21154722; PubMed=11230937;
                                                                                                                                           STRAIN=138-2;
MEDLINE=98386520; PubMed=9720051;
                                    01-NOV-1998 (TrEMBLrel. 08, 01-NOV-1998 (TrEMBLrel. 08, 01-OCT-2003 (TrEMBLrel. 25,
                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                  169 APMWLR 174
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                   SEQUENCE FROM N.A.
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                                                                                                                 NCBI_TaxID=663;
                                                                  Fmu protein.
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                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                           Name=Fmu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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                            087727:
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                  087727
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RESULT 4
087727
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CTISSUE=Bone marrow, Brain, and Kidney;

NET TISSUE=Bone marrow, Brain, and Kidney;

MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

Rausberg R.L., Ferigoold B.A., Grouse L.H., Derge J.G.,

Ralusner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Altschul S.F., Zeeberg B., Buerow K.H., Schaefer C.F., Bat N.K.,

Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Districhenco L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schetz T.E.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Vilalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Rahaksley W., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Whiting M., Madan A., Young A.C., Shewchenko Y., Bouffard G.G.,

Buterfield Y.S. N., Krzywinski M.I., Skalska U., Smailus D.E.,

B. Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE PROW N.A.

Ebert L., Schlock M., Neubert P., Schatten R., Henze S., Korn B.;
"Cloning of human full open reading frames in Gateway(TM) system entry vector (pDONR201).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-!- FUNCTION: Not known, associated with cell differentiation.
-!- SIMILARITY: Belongs to the UPF0071 family. Some similarity to the thioredoxin family.
TXN9 HUMAN STANDARD; PRT; 226 AA.
014530; QGNSF5; Q9BRU6;
15-JUL-1999 (Rel. 38, Created)
28-FBB-2003 (Rel. 41, Last sequence update)
01-OCT-2004 (Rel. 45, Last annotation update)
Thioredoxin domain containing protein 9 (Protein 1-4) (ATP binding protein associated with cell differentiation).
Name=TXNDC3; Synonyms=APACD;
Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Differential expression of 1-4 gene in functionally distinct ME-1
                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
MCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                subclones.";
Submitted (AUG-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
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InterPro, IPR006662; Thiored.
InterPro, IPR006663; Thioredox dom2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and mouse cDNA sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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Matches
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RR STAIN=C.5/BLALAD.

RR MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;

RA OKAZAKI Y. Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,

RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,

RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,

RA Badarellia R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,

RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,

Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,

RA Balla E., Dragami T.A., Fletcher C.F., Forrest A., Gugh J.,

RA Gasterland T., Gariboldi M., Gissi C., Godzik A., Gugh J.,

RA Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,

RA Konagaya A., Kurochkin I.V., Lee Y., Ienhard B., Iyons P.A.,

RA Magohima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,

RA Magashima T., Numata K., Okido T., Read J., Ringwald M.,

RA Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,

RA Sultana R., Schneider C., Semple C.A., Sectou M., Schnada K.,

Sandelin A., Schneider C., Semple C.A., Sectou M., Sahnada K.,

RA Wana Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,

RA Khiraki T., Waki K., Kawai J., Aznagisawa M., Yang I., Wang L.,

RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Pukuda S.,

RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Pukuda S.,

RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Pukuda S.,

RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Pukuda S.,

RA Shiraki A., Sakai K., Sasaki D., Shibata K., Indher E.S., Rogers J.,

RA Hirev M., B. Havashizaki Y.,

RA Shiraki T., Savalino M., Waterston R., Lander E.S., Rogers J.,

RA Birney R.,

RA Shiraki T.,

RA Sakai K., Sasaki D., Aizawa K., Arakawa T., Pukuda S.,

RA Shiraki T.,

RA Sakai K., Sasaki D., Shibata K., Iloh M.,

RA Shiraki T.,

RA Shiraki T.,

RA Shiraki T.,

RA Shiraki T.,

RA S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs.";
Nature 420:563-573(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Strausberg R.L., Feingold E.A., Grouse I.H., Derge J.G.,
Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetchew K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Millahy S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                     0;
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                                                                                                                                                                                                                                                                                            01-0cr-2004 (Rel. 45, Created)
01-0cr-2004 (Rel. 45, Last sequence update)
01-0cr-2004 (Rel. 45, Last annotation update)
Thioredoxin domain containing protein 9 (ATP binding protein associated with cell differentiation).
                                                                    DB 1; Length 226;
                                                                                                     Indels
122 K -> N (in Ref. 1).
214 I -> M (in Ref. 1).
26534 MW; 2735A2562D1143C3 CRC64;
                                                      30.0%; Scor.
100.0%; Pred. No.
                                                                                                                                                                                                                                                             226 AA
                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                 Name=Txndc9; Synonyms=Apacd;
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                                                                                                       6; Conservative
                                                                                                                                                                                                                                                             STANDARD;
              214 2
226 AA;
                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (Mouse)
                                                                                                                                                                        119 LETKFL 124
                                                                    Query Match
Best Local Similarity
                                                                                                                                       15 LETKFL 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=C57BL/6J;
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              CONFLICT
CONFLICT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation — the Buropan Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/amnounce/or send an email to license@isb-sib.ch).
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Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Mhiting M., Madan A., Young A.C., Shevchenko Y., Boulfard G.G., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Schein J.S., Schein J.S., Maxilus D.E., Schnerch A., Schein J.E., Jones S.J.M., Maxra M.A.; "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIMILARITY: Belongs to the UPF0071 family. Some similarity to the thioredoxin family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -!- SIMILARITY: Belongs to the UPF0071 family. Some similarity to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                         Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-OCT-2004 (Rel. 45, Last sequence update)
01-OCT-2004 (Rel. 45, Last annotation update)
Thioredoxin domain containing protein 9 (ES cell-related protein)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 226;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam; PF00085; Thioredoxin; 1. SEQUENCE 226 AA; 26260 MW; B90255DDAEE402BC CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30.0%; Score 6; I
100.0%; Pred. No.
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InterPro; IPR006663; Thioredox_dom2.
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100.0%; Pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; AK002893; BAB22438.1; -. EMBL; AK006170; BAB24440.1; -. EMBL; AK010709; BAB27134.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AK011424; BAB27611.1; -. EMBL; AK016756; BAB30412.1; -.
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01-0CT-2004 (Rel. 45, Last seq
01-0CT-2004 (Rel. 45, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             thioredoxin family.
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Best Local 9
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PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                              165 LETKFL 170
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Best Local Similarity
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SEQUENCE 238 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fusobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Name=FNV0648;
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05-JUL-2004
05-JUL-2004
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                                                                                                                                                                                                                                                                                            Query Match
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modified and this statement is not removed. Usage by and for commercial and incommercial and incommercial and incommercial and incomment (See http://www.isb-sib.ch/announce/
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Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis sp. strain PCG803. I. Sequence features in the 1 Mb region from map positions 64% to 92% of the genome.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Euteleostomi;
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MEDLINE=96127529; PubMed=8590279;
Kaneko T., Tanaka A., Sato S., Kotani H., Sazuka T., Miyajima N.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Butele
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30.0%; Score 6; DB 2; Length 226; 100.0%; Pred. No. 97; 0; Indels tive 0; Mismatches 0; Indels
                                                                                                                                                                    DB 1; Length 226;
                                                                                                                                                                                                           Indels
                                                                                     EMBL; AF508022; AAM34684.1; ALT INIT.
InterPro; IPR006663; Thioredox dom2.
SEQUENCE 226 AA; 26272 MW; EDASBF54C18AE68A CRC64;
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Bacteria; Cyanobacteria; Chroococcales; Synechocystis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-FEB-1997 (TrEMBLrel. 02, Created)
01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                        226 AA.
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                                                                                                                                                                30.0%; Score 6; DB 1
100.0%; Pred. No. 97;
tive 0; Mismatches
                                entities requires a license agreement (or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                                                                                                                                                                               Created)
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MEDLINE=97061201; PubMed=8905231;
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                                                                                                                                                                Query Match
Best Local Similarity 100.
Matches 6; Conservative
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Matches 6; Conservative
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CAG33216;
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CAG33216
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Kaneko T., Sato S., Kotani H., Tanaka A., Asamizu E., Nakamura Y., Miyajima N., Hirosawa M., Sugiura M., Sasamoto S., Kimura T., Hosouchi T., Matsuno A., Muraki A., Nakazaki N., Naruo K., Okumura S., Shimpo S., Takeuchi C., Wada T., Watanabe A., Yamada M., Yasuda M., Tabata S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                      "Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis sp. strain PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Karpatral V., Ivanova N., Anderson I., Reznik G., Bhattacharyya A., Gardner W.L., Mikhailova N., Larsen N., D'Souza M., Walunas T., Haselkorn R., Overbeek R., Kyrpides N.; Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases -!- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; AABF0100090; EAA23737.1; -0. GO; GO: 0005737; C: Cytoplasm; IEA. GO; GO: 0005737; C: Cytoplasm; IEA. GO; GO: 0016491; F: Shikimate 5-dehydrogenase activity; IEA. GO; GO: 0016689; P: arcomatic amino acid family biosynthesis, sh. InterPro; IPR006151; Shikimate_DH. From PF01488; Shikimate_DH. Oxidoreductase.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30.0%; Score 6; DB 2; Length 238; 100.0%; Pred. No. 1e+02; cive 0; Mismatches 0; Indels
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Bacteria; Fusobacteria; Fusobacterales; Fusobacteriaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30.0%; Score 6; DB 2; Length 250; 100.0%; Pred. No. 1.1e+02; trive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                         238 AA; 25843 MW; F016A42E3DD3E588 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAR-2004 (TrEMBLrel. 26, Created)
01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
01-WAR-2004 (TrEMBLrel. 26, Last annotation update)
Shikimate 5-dehydrogenase (BC 1.1.1.25).
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(TrEMBLrel. 27, Last sequence update)
(TrEMBLrel. 27, Last annotation update)
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                                                                                                                                                                                                                                                                            DNA Res. 3:109-136(1996).
EMBL; D90904; BAA17250.1; -.
PIR; S75336; S75336.
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STRAIN=Ames / isolate Porton;

X MEDLINE=22608414; PubMed=12721629; DOI=10.1038/nature01586;

A REAG T.D., Peterson S.N., Tourasse N.J., Baillie L.W., Paulsen I.T.,

A Read T.D., Peterson S.N., Tourasse N.J., Baillie L.W., Paulsen I.T.,

A Holtzapple E.K., Okstad O.A., Helgason E., Rilstone J., Wu M.,

A Kolonay J.F., Beanan M.J., Dodson R.J., Brinkac L.M., Gwinn M.L.,

A Rolonay J.F., Meanan M.J., Dodson R.J., Brinkac L.M., Gwinn M.L.,

Benton J.L., Mahamoud Y., Jiang L., Hance I.R., Weidman J.F.,

Benton J.L., Mahamoud Y., Jiang L., Hance I.R., Weidman J.F.,

A Hazen A., Cline R.T., Redmond C., Thwaite J.E., White O.,

Salzberg S.L., Thomason B., Friedlander A.M., Koehler T.M.,

Hanna P.C., Kolstoe A.-B., Fraser C.M.;

"The genome sequence of Bacillus anthracis Ames and comparison to nature 423:81-86(2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=Ames / isolate 0581;
Ravel J., Rasko D.A., Shumway M.F., Jiang L., Cer R.Z., Federova N.B.,
Wilson M., Stanley S., Decker S., Read T.D., Salzberg S.L.,
Fraser C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Brettin T.S., Bruce D., Challacombe J.F., Gilna P., Han C., Hill K., Hitchcock P., Jackson P., Keim P., Longmire J., Lucas S., Okinaka R., Richardson P., Rubin E., Tice H.; Submitted (JAN-2004) to the BrEL/GenBank/DDBJ databases.

BMBL; AB017334, AA730974.1; --
BMBL; AB017225, AA754039.1; --
TIGR; BA1859; --
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Rasko D.A., Ravel J., Oekstad O.A., Helgason E., Cer R.Z., Jiang L.,
Shores K.A., Fouts D.E., Tourasse N.J., Angiuoli S.V., Kolonay J.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30.0%; Score 6; DB 2; Length 253; 100.0%; Pred. No. 1.1e+02; rive 0; Mismatches 0; Indels
                       Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
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NCBI_TaxID=222523;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Bacillus anthracis comparative genomics.";
Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.
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Last annotation update)
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Bacillus cereus (strain ATCC 10987).
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02-MAR-2004 (TrEMBLrel. 27,
02-MAR-2004 (TrEMBLrel. 27,
04-MAY-2004 (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR004183; LigB. Pfam; PF02900; LigB; 1.
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Bacillus anthracis.
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Best Local Similarity
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                                                                                                          SEQUENCE FROM N.A.
                                                NCBI_TaxID=1392;
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                                                                                                                                                                                             STRAIN=97-27;
Brettin T.S., Bruce D., Challacombe J.F., Gilna P., Han C., Hill K., Hitchcock P., Jackson P., Keim P., Longmire J., Lucas S., Okinaka R., Richardson P., Rubin B., Tice H.;
Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; AR017355; AATS9607_1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PubMed=14960714;
Rasko D.A., Ravel J., Oekstad O.A., Helgason E., Cer R.Z., Jiang L.,
Rasko D.A., Ravel J., Oekstad O.A., Helgason E., Cer R.Z., Jiang L.,
Shores K.A., Fouts D.E., Tourasse N.J., Angluoli S.V., Kolonay J.F.,
Nelson W.C., Kolstoe A.-B., Fraser C.M., Read T.D.;
"The genome sequence of Bacillus cereus ATCC 10987 reveals metabolic
adaptations and a large plasmid related to Bacillus anthracis pXOl.";
Nucleic Acids Res. 32:977-988 (2004).
INGRE, AE017270; AAS40868.1; -.
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                                                   Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus;
Bacillus thuringiensis serovar konkukian.
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Bacteria, Firmicutes, Bacillales; Bacillaceae, Bacillus.
                                                                                                                                                                                                                                                                                                                                                               InterPro, IPR004183; LigB.
Pfam, PR02900; LigB; 1.
Hypothetical protein.
SEQUENCE 253 AA, 28619 MW; 863533F0058AB72E CRC64;
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                            Bacillus thuringiensis serovar konkukian str. 97-27
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Last annotation update)
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01-JUM-2003 (TrEMBLrel. 24,
01-JUN-2003 (TrEMBLrel. 24,
01-OCT-2004 (TrEMBLrel. 28,
Oxidoreductase.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro, IPR004183; LigB.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6; Conservative
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     ORFNames=BT9727 1700;
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Best Local Similarity
Matches 6; Conserv
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Best Local Similarity
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                                                                                                                   NCBI_TaxID=281309;
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05-JUL-2004
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AAH60541;
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SEQUENCE
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EMBL; AE017334; AAT30974.1; -- SEQUENCE 253 AA; 28572 MW; 3EC1170776803076 CRC64;
Nelson W.C., Kolstoe A.-B., Fraser C.M., Read T.D.;
"The genome sequence of Bacillus cereus ATCC 10987 reveals metabolic
adaptations and a large plasmid related to Bacillus anthracis pXOl.";
Nucleic Acids Res. 32:977-988(2004).
BMBL, ABO172270, AAS4086B.1; -.
SEQUENCE 253 AA; 28543 MW; C38ACID894E45IBA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=pituitary gland;
MEDLINE=22380257; PubMed=12477932;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Strausberg R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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                                                                                                                                                                         Query Match
30.0%; Score 6; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 6; Conservative 0; Mismatches 0; Indels
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Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUN-2004 (TrEMBLrel. 27, Created)
01-JUN-2004 (TrEMBLrel. 27, Last sequence update)
01-JUN-2004 (TrEMBLrel. 27, Last annotation update)
Cxidoreductase.
GBAA1859.
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Last annotation update)
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05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last seq.
05-JUL-2004 (TrEMBLrel. 27, Last ann
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Name=LOC280671;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                         87 MLETKF 92
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AAT30974;
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Q6P9X7
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MEDINE=228825; PubMed=12477932;

MEDINE=228825; PubMed=12477932;

MEDINE=228825; PubMed=12477932;

MEDINE=228825; PubMed=12477932;

MALSCHOL S.F., Colling F.S., Magner L., Shenmen C.M., Schuler G.D.,

Altschul S.F., Zeeberg B. Buerow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Heish F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Heish F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Heng L.,

Stapleton M., Saares M.B., Bonaldo M.F., Casavant T.L., Scheerz T.E.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Brownstein M.J., Wokernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.H.,

Whilalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Whiting M., Madan A., Young A.C., Shevchenko Y., Boulfard G.G.,

Mitching M., Madan A., Young A.C., Shevchenko Y., Boulfard G.G.,

Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

"Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Sanchez A. Korzywinski M.I., Skalska U., Schmutz J., Myers R.M., Butterfield Y.S., Krzywinski M.I., Skalska U., Smailus D.E., Schmerch A., Schein J.E., "Generation and initial analysis of more than 15,000 full-length human and mouse cDMA Sequences."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rattus norvegicus (Rat).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Strausberg R.; Submitted (OCT-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               259 AA; 29764 MW; 008F5E943F78D68A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
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02-MAR-2004 (TrEMBLrel. 27, La
LOC280671 protein (Fragment)
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TISSUE=Pituitary gland;
Strausberg R.;
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AROE BACHD
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kausner R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Ktausner R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Ktausner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Josdan H., Moorer T., Max S.I., Warg J., Hsieh F.,

Batchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares W.B., Bonaldo M.F., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

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Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

A Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Rabey J., Helton E., Ketteman M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Rayarsa K.C., Grimwood J., Schmutz J., Myers R.M., Buterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

"Generation and initial analysis of more than 15,000 full-length human
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
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                                                                                                                                    30.0%; Score 6; DB 2; Length 259; 100.0%; Pred. No. 1.1e+02; ive 0; Mismatches 0; Indels
EMBL; BC060541; AAH60541.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Strausberg R.;
Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.
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                                                                                              259 AA; 29764 MW; 008F5E943F78D68A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                               13-MAY-2004 (TrEMBLrel. 27, Last sequence update)
13-MAY-2004 (TrEMBLrel. 27, Last annotation update)
APACD protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                            267 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                      Created)
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NON TER
SEQÜENCE 267 AA; 31040 MW
                                                                                                                                                                                                                                                                                                                                                                                                                    (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and mouse cDNA sequences.
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Matches 6; Conservative
                                                                                                                                                                                 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (Human)
                                                                                                                                                                                                                                                                152 LETKFL 157
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                                                                                                                                      Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9606;
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13-MAY-2004 (
13-MAY-2004 (
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                                                                                              SEQUENCE
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AAH70183;
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ID AROE_CLO
AC Q8XMI8;
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                                                                                                                                                                                                                                                                                                                               RESULT 19
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=13 / Type A;
PubMed=11792842; DOI=10.1073/pnas.022493799;
PubMed=11792842; DOI=10.1073/pnas.022493799;
Shimizu T., Ohtani K., Hirakawa H., Ohshima K., Yamashita A.,
Shiba T., Ogasawara N., Hattori M., Kuhara S., Hayashi H.;
"Complete genome sequence of Clostridium perfringens, an anaerobic flesh-eater.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .. Natl. Acad. Sci. U.S.A. 99:996-1001(2002).
CATALYTIC ACTIVITY: Shikimate + NADP(+) = 5-dehydroshikimate +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PATHWAY: Aromatic amino acids biosynthesis; shikimate pathway;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN=C-125 / JCM 9153;
MEDLINE=20512582; PubMed=11058132;
MEDLINE=20512582; PubMed=11058132;
Madami H., Nakasone K., Takaki Y., Maeno G., Sasaki R., Masui N., Fuji F., Hirama C., Nakamura Y., Ogasawara N., Kuhara S., Horikoshi K.;
                                                                                                                                                                                 Clostridium perfringens.
Bacteria; Firmicutes; Clostridia; Clostridiales; Clostridiaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;

    -!- SIMILARITY: Belongs to the shikimate dehydrogenase family.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30.0%; Score 6; DB 1; Length 271; 100.0%; Pred. No. 1.1a+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bacteria, Firmicutes, Bacillales, Bacillaceae, Bacillus.
NCBI_TaxID=86665,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           271 AA; 30505 MW; 311AFA6C6B63ACFE CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-FEB-2003 (Rel. 41, Last sequence update) 05-UUL-2004 (Rel. 44, Last annotation update) Shikhimate 5-dehydrogenase (EC 1.1.1.25).
                              28-FEB-2003 (Rel. 41, Last sequence update) 05-UUL-2004 (Rel. 44, Last annotation update) Shikimate 5-dehydrogenase (EC 1.1.1.25). Names-aroE; orderedLocusNames=CPE0700;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        278 AA.
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TIGRPAMS; TIGR01809; \operatorname{Shik-DH-AROM}_i 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HAMAP; MF 00222; -; 1.
InterPro; IPR006151; Shikimate DH.
Pfam; PF01488; Shikimate DH; 1.
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(Rel. 41, (Rel. 41,
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                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                   NCBI_TaxID=1502;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                fourth step.
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Patel S., Ph
Celniker S.;
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                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
Adamstides P.G., Scherer S.E., Li P.W., Hookkins R.A., Galle R.F.,
Adamstides P.G., Scherer S.E., Li P.W., Hookkins R.A., Galle R.F.,
Adeorge R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
Ashardon R.C., Rogers Y.H., Blazej R.G., Champe M., Pfeiffer B.D.,
Ashardon R.C., Rogers Y.H., Blazej R.G., Champe M., Pfeiffer B.D.,
Anil J.F., Agbayani A., An H.J., Andrews-Pfannkoch C., Baldwin D.,
Abril J.F., Agbayani A., Baxendale J., Barktaroglu L., Beasley E.M.,
Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
Abritis K.C., Busam D.A., Buller H., Cadieu E., Center A., Chandra I.,
Abritis K.C., Busam D.A., Buller H., Cadieu E., Center A., Chandra I.,
Abritis K.C., Daub L.B., Dahnke C., Davenport L.B., Davies P.,
Aboson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
Aborin K.J. Evangelista C.C., Ferraz C., Ferriera S., Fleischmann W.,
Along F., Gorge T., Garg N.S., Galbart W.M., Glasser K.,
Alarris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
Abritin D., Houston K.A., Howland T.J., Wei M.H., Ibegwam C.,
Alalii M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
Nucleic Acids Res. 28:4317-4331(2000).
-!- CATALYTIC ACTIVITY: Shikimate + NADP(+) = 5-dehydroshikimate +
                                                                                                PATHWAY: Aromatic amino acids biosynthesis; shikimate pathway;
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                                                                                                                                    fourth step.
-!- SIMILARITY: Belongs to the shikimate dehydrogenase family.
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Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Moptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.

NCBI_TaxID=7227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aromatic amino acid biosynthesis; Complete proteome; NADP;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
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100.0%; Pred. No.
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HSSP; Q5848t; INVT.
HAMAP; MF 00222; -; 1
InterPro; IPR006151; Shikimate DH.
PFam; PF0148f Shikimate DH; 1.
TIGRFAMS; TIGR00507; arcE; 1.
TIGRFAMS; TIGR01809; Shik-DH-AROM; 1
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Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z., Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X., Al Liu X., Mattei B. McIntosh T.C., McLeod M.P., McPherson D., Mcris G., Mishina N.V., Mobarry C., Morris J., McShrefi A., Mount S.M., Moy M., Murphy B., Murphy L., Murphy D.M., Nelson D.L., Ralazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., Rainert K., Saunders R.D., Scheeler F., Shen H., Abier B.C., Siden-Kiamos I., Simpson M., Strong R., Smith T., Spier E., Spradling A.C., Staplecon M., Strong R., Smith T., Spier E., Spradling A.C., Staplecon M., Strong R., Smith T., Svirskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X., Walliams S.M., Woodagef W.C., Wu D., Yang S., Yao Q.A., Ye R. F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zhao Q., Zheng X., Keh R.F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L., Shops R.H., Wers E.W., Rubin G.M., Venter J.C.; Shops R.H., Venter E.W., Smith H.O., Rhogen R.H., Mayers E.W., Rubin G.M., Venter J.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.

MEDLINE=22426065; PubMed=12537568;

MEDLINE=22426065; PubMed=12537568;

Celniker S.E., Wheeler D.A., Krommiller B., Carlson J.W., Halpern A.,

Patel S., Adams M., Champe M., Dugan S.P., Frise E., Hodgson A.,

George R.A., Hoskins R.A., Laverty T., Muzny D.M., Nelson C.R.,

Pacleb J.M., Park S., Pfeiffer B.D., Richardas S., Sodergren B.J.,

Svirskas R., Tabor P.E., Wan K., Stapheron M., Sutton G.G., Venter C.,

Weinstrock G., Scherer S.E., Myers E.W., Gibbs R.A., Rubin G.M.;

"Finishing a whole-genome shotgun: release 3 of the Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
MEDLINE=22426070; PubMed=12537573;
MEDLINE=22426070; PubMed=12537573;
Kaminker J.S., Bergman C.M., Kronmiller B., Carlson J., Svirskas R., Patel S., Frise E., Wheeler D.A., Lewis S.E., Rubin G.M., Ashburner M., Celniker S.E.;
"The transposable elements of the Drosophila melanogaster euchromatin:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=22426069; PubMed=12537572;
Misra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S., Hradecky P., Huang Y., Kaminker J.S., Millburn G.H., Prochnik S.E., Smith C.D., Tupy J.L., Whitfied E.J., Bayraktaroglu L., Berman B.P., Bettencourt B.R., Celniker S.E., de Grey A.D., Drysdale R.A., Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q., Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson J., Champe M., Chavez C., Dorsett V., Dresnek D., Farfan D., Frise E., George R., Gonzalez M., Guarin H., Kronmiller B., Li P., Liao G., Miranda A., Mungali C.J., Nunco J., Pacleb J., Paragas V., Park S., Patel S., Phouanenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Annotation of the Drosophila melanogaster euchromatic genome: a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases
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EMBL; AE003624; AAF52757.1; -.
EMBL; AY061432; AAL28980.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      melanogaster euchromatic genome sequence.";
Genome Biol. 3:RESEARCH0079-RESEARCH0079(2002).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genome Biol. 3:RESEARCH0083-RESEARCH0083(2002)
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Local Similarity
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Neurospora crassa.
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01-JUN-2001
01-JUN-2001
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READLINESTRON N.A.

READLINESTRON N.A.

RAMAMATICLES FROM N.A.

RAMAMATICLES F.G., Scherer S.E., Holt R.A., Evans C.A., Gocayne J.D.,

RAMAMATICLES F.G., Scherer S.E., Holt R.A., Fabburner M., Henderson S.N.,

RAMAMATICLES F.G., Scherer S.E., Tip P.M., Hoskins R.A., Galle R.F.,

RAMAMATICLES F.G., Scherer E.G., Labrado C., Chang C., Chang C.,

RAMAN K.H., Doyle C., Baxer E.G., Helt G., Malson C.R., Gabor G.L.,

RAMAN K.H., Doyle C., Baxer E.G., Helt G., Malson C.R., Gabor G.L.,

RAMAIL J.F., Apbayani A., An H.J., Andrews-Framkoch C., Baldwin D.

RAMAN K.H., Doyle C., Baxer B.D., Barchand B.D., Borsten D., Borctlar P.,

RAMAN K.H., Doyle C., Barder B.D., Schadten D., Bortlar P.,

RAMAN K.H., Doyle C., Barder B.D., Schadten D., Bortlar P.,

RAMAN K., Golf F. Downes M., Deng Z., Mays A.D., Dew I., Dietz S.M.,

RAMAN K., Doup L.E., Downes M., Dogan-Rocha S., Dunkov B.C., Dunn P.,

RAMAN K., Doup L.E., Downes M., Dogan-Rocha S., Dunkov B.C., Dunn P.,

RAMAN K., Markellan A.R., Garg N.S., Galbart W.M., Glasser K.,

RAMAN K., Markellan F., Karpen G.H., Ke Z., Kannison J.A., Ketchum K.A.,

RAMAN K., Marvey D., Helman T.J., Hernandez J.R., Houck J.,

RAMAN K., Matter B., McInton T.J., Meriandez J.R., Houck J.,

RAMAN K., Matter B., McInton T.J., Weim M.H., Inequam C.,

RAMAN K., Matter B., McInton T.J., McInton D., McInton D.,

RAMAN K., Matter B., McInton T.C., Kravitz S., Kulp D., Lai Z.,

Liu X., Matter B., McInton T.C., Kravitz S., Kulp D., Lai Z.,

RAMAN M., My M., Murphy B., Murphy L., Murzhy D.M., Nelson D.L.,

RAMAN M. Mount S.M., Murphy B., Murphy L., Murzhy D.M., Nelson D.K.,

RAMAN M. Mount S.M., Murphy B., Murphy L., Marzhy D.M., Nelson D.K.,

RAMAD R., Spradling A.C., Stapleton M., Stupski M.P., Smith T.,

Spier E., Spradling A.C., Stapleton M., Stupski M.P., Smith T.,

RAMAD R., Mayor R., Murbirstock G.M., Weissenbach J., Wang X.,

RAMAD R., Mayor R., Rubishon G.M., Weissenbach J., Wang X.,

RAMAD R., Mayor R., Rubishon G.M., Weissenbach J., Wang X.,

RAMAD R., Wang R., Rubishon G.M.
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                                                                                           Gaps
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0
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Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
                                              Length 315;
                                                                                         0; Indels
315 AA; 34680 MW; ACIDF9F5960C9F2A CRC64;
                                                                                                                                                                                                                                                                                                                                                               Last sequence update)
Last annotation update)
                                            Score 6; DB 2; Ler
Pred. No. 1.3e+02;
                              30.0%; Scor.
100.0%; Pred. No. 1...
                                                                                                                                                                                                                                                                                                319 AA.
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NCBI_TaxID=7227;
                                                                                                                                                                                                                                                                                                                                            Created)
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MEDLINE=22426065; PubMed=12537568;
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                                                                                           Conservative
                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                            CG4454-PB (RE31802p).
                                                               Best Local Similarity
                                                                                                                                       LETKFL 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                 ORFNames=CG4454;
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01-MAR-2003 (
05-JUL-2004 (
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    SEQUENCE
                                            Query Match
                                                                                           Matches
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       Venter C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDITRE=22426069; PubMed=12537572;
Mistra S., Crosby M.A., Mungall G.J., Matthews B.B., Campbell K.S.,
Mistra S., Crosby M.A., Mungall G.J., Millburn G.H., Prochnik S.E.,
Smith C.D., Tupy J.L., Whitfied B.J., Bayraktaroglu L., Berman B.P.,
Bettencourt B.R., Celniker S.E., de Grey A.D., Drysdale R.A.,
Harris N.L., Richter J., Kusso S., Schroeder A.J., Shu S.Q.,
Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
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Stableton M., Brokstein P., Hong L., Agbayani A., Carlson J.,
Champe M., Chavez C., Dorsett V., Dresnek D., Farfan D., Frise B.,
George R., Gonzalez M., Guarin H., Kronmiller B., Li P., Liao G.,
Miranda A., Mungall C.J., Nunco J., Pacleb J., Paragas V., Park S.,
Patel S., Phouanenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M.,
Celniker S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Annotation of the Drosophila melanogaster euchromatic genome: a
Svirskas R., Tabor P.E., Wan K., Stapleton M., Sutton G.G., Vent Weinstock G., Scherer S.E., Myers E.W., Gibbs R.A., Rubin G.M.; "Finishing a Whole-genome shockun: release 3 of the Drosophila melanogaster euchromatic genome sequence."; Genome Biol. 3:RESEARCH0079-RESEARCH0079(2002).
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Sordariomycetidae; Sordariales; Sordariaceae; Neurospora.
NCBI_TaxID=5141;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases
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EMBL; BT01609; AAN11364.1; -.
FlyBase; FBGN0032105; CG4454.
SEQUENCE 319 AA; 35115 MW; 1F70AA48CDC2D369 CRC64;
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01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
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Genome Biol. 3:RESEARCH0084-RESEARCH0084(2002).
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100.0%; Pred. No. ...
0; Mismatches
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                                                                                                                                                                                                                                                                MEDLINE=22426070; PubMed=12537573;
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NCBI_TaxID=9606;
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MEDINE=2238825; PubMed=12477932;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heibh F.,

A Altschul S.F., Zeeberg B., Bonaldo M.E., Carahnor D., Hong D.,

A Stapleton M., Soares M.B., Bonaldo M.F., Carahnor P., Prange C.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carahnor P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunzatne P.H.,

Richards S., Worley K.C., Hale S., Garder A.M., Gay L.J., Hulyk S.W.,

A Nilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

A Halton E., Ketreman M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Rodiguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Maryaniski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

A Jones S.J., Marra M.A.;

T "Generation and initial analysis of more than 15,000 full-length human
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                          Schulte U., Aign V., Hoheisel J., Brandt P., Fartmann B., Holland R., Nyakatura G., Mewes H.W., Mannhaupt G.;
Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
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0. 1.5e+02;
ches 0; Indels
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                                                                                                                                                   German Neurospora genome project;
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; ALS13465; CAC28792.1; -.
InterPro; IPR010987; GST_C_like.
Hypothetical protein.
SEQUENCE 384 AA; 42398 MW; BB94D063B3D0003B CRC64;
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Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases.
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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100.0%; Pred. No. 1.6e+02;
tive 0; Mismatches 0;
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100.0%; Pred. No. 1.5
tive 0; Mismatches
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Best Local Similarity 100.09
Matches 6; Conservative
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Matches 6; Conserv
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                                                                                                                              SEQUENCE FROM N.A.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Mammalia, Butheria, Primates; Catarrhini, Hominidae, Homo.
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PubMed=14702039;
Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R.,
Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makika H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Strausberg R.;
Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; BC064143; AAH64143.1; -. SEQUENCE 388 AA; 42750 MW; D3348B52E75181AB CRC64;
                                                                                                               Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    395 AA
                                                                              Created)
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Homo sapiens (Human).
                                                                      02-MAR-2004 (TrEMBLrel. 27, 02-MAR-2004 (TrEMBLrel. 27, 102-MAR-2004 (TrEMBLrel. 27, 17)
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PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                  FLJ32702 protein.
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RSMB_VIBVU
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RA Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K., Yamakami K., Yasuda T., Isono Y., Nakamura Y., Nagahari K., Rakabari T., Yasuda T., Nagateuma M., Shizatori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sudawara M., Arahashi M., Kanda K., Kakuta T., Kandirara K., Katsuta N., Sato K., Tanikwaw B., Omura Y., RA Abe K., Kamihara K., Katsuta N., Sato K., Tanikwaw M., Yamazaki M., Minomiya K., Ishibashi T., Yamashita M., Hotuta T., Kusano J., RA Tanai H., Kimata M., Watanabe M., Hiraoka S., Chiba Y., Ishida S., Arahashi-Fujii A., Hara H., Tanase T., Nomura Y., RA Maneori K., Takahashi-Fujii A., Hara H., Tanase T., Imose N., Angiya S., Komai F., Hara R., Takeuchi K., Arita M., Mocura Y., RA Moriya S., Komai F., Satoh N., Takani S., Nahimizu F., Wakebe H., Rasahima Y., Sano S., Moriya S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H., Rakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H., Rahagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wawabata A., Hishigaki H., Watanabe K., Kumagai A., Takemoto M., Kawakami B., Rawabata A., Hikiji T., Noguchi S., Itoh T., Shigeta K., Senba T., Rakabami T., Oyama M., Hata H., Matanabe M., Komatsu T., Shigeta K., Sanaki M., Matanabe M., Komatsu T., Matsuma M., Hata H., Matanabe M., Komatsu T., Shigeta K., Sawabata A., Hikiji T., Oyama M., Hata H., Matanabe M., Komatsu T., Okamoto J., Satoh T., Shigata K., Sawabita R., Matsuma M., Hata H., Watanabe M., Komatsu T., Oyama M., Hata H., Watanabe M., Komatsu T., Oyama M., Hata H., Watanabe M., Komatsu T., Nakagawa K., Matsuhima-Sugano J., Sacoh T., Shirai Y., Takahashi Y., Nakagawa K., Awabata R., Nakaima Y., Mizuno T., Morinaga M., Sasaki M., Matanabe T., Shirai Y., Takahashi Y., Yawashita R., Nakai K., Yada T., Nomura N., Khuchi H., Matanabe M., Komatsu T., Sugano S., Nakai K., Yada T., Nakamura N., Ohara O., Isogai T., Sagan J., Ohara O., Isogai T., Sagan S., Ohara O., Isogai T., Sagan S., Ohasa C., Sagan J., Ohana C., Nagasa T., Ohasa C., Nagasa T., Ohasa C., Nagasa T., Oh
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-JUL-2004 (Rel. 44, Created)
05-JUL-2004 (Rel. 44, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Ribosomal RNA small subunit methyltransferase B (EC 2.1.1.-) (rRNA (cytosine-C(5)-)-methyltransferase) (165 rRNA m5C967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bacteria; Proteobacteria; Gammaproteobacteria; Xanthomonadales;
Xanthomonadaceae; Xylella.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30.0%; Score 6; DB 2; Length 395; 100.0%; Pred. No. 1.6e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=20365717; PubMed=10910347; DOI=10.1038/35018003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nat. Genet. 36:40-45(2004).
EMBL; AK057264; BAB71401.1; -.
SEQUENCE 395 AA; 43443 MW; 2B7BEB5355377F87 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=rsmB; Synonyms=rrmB; OrderedLocusNames=Xf0928; Xylella fastidiosa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- FUNCTION: Specifically methylates the cytosine at position 967
-!- FUNCTION: Specifically methylatity).
-!- CAPTALTITIC ACTIVITY: S-adenosyl-L--
homocysteine + IRNA containing C(5)-methylcytosine.
-!- SIMILARITY: Belongs to the methyltransferase superfamily. RsmB/NOP
Marques M.V., Martins E.A.L., Martins E.M.F., Matsukuma A.Y.,
Menck C.F.M., Miracca E.C., Miyaki C.Y., Monteiro-Vitorello C.B.,
Mono D.H., Nagai M.A., Nascimento A.L., To., Netto L.B.S.,
Mani A. Ji., Nobrega F.G., Nunes L.R., Oliveira M.A.,
de Oliveira M.C., de Oliveira R.C., Palmieri D.A., Paris A.,
Peixoto B.R., Pereira G.A.G., Pereira H.A. Jr., Pesquero J.B.,
A Quaggio R.B., Roberto P.G., Rodrigues V., de Rosa A.J. M.,
de Rosa V.B. Jr., Ae Sa R.G., Santelli R.V., Sawasaki H.E.,
da Silva A.C.R., da Silva A.M., da Silva F.R., Silva W.A. Jr.,
da Silva A.P., Terenzi M.F., Truffi D., Tsai S.M., Tshlako M.H.,
Nallada H., Van Sluys M.A., Verjovski-Almeida S., Vettore A.L.,
A Zago M.A., Zatz M., Meidanis J., Setubal J.C.;
The genome sequence of the plant pathogen Xylella fastidiosa.";
Inture 406:151,159(200)
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05-JUL-2004 (Rel. 44, Last annotation update)
Ribosomal RNA small subunit methyltransferase B (EC 2.1.1.-) (rRNA (cytosine-C(5)-)-methyltransferase) (16S rRNA m5C967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
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InterPro; IPR001679; Fmu NOLI/Nop2P.
InterPro; IPR001601; Methyltransf.
InterPro; IPR066027; NusB.
InterPro; IPR066174; NusB region.
InterPro; IPR006174; NusB region.
Pfam; PF01189; NolI_Nop2_Sun; I.
Pfam; PF01029; NusB; I.
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PIR; A82744; A82744.
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TIGRFAMS; TIGR00563; rsmB; 1.
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Best Local Similarity
Matches 6; Conserv
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-!- FUNCTION: Specifically methylates the cytosine at position 967
-("5C967) of 16S TRNA (By similarity).
-!- CATALYTIC ACTIVITY: S-adenosyl-L-methionine + rRNA = S-adenosyl-L-homocysteine + rRNA containing C(5)-methylcytosine.
-!- SIMILARITY: Belongs to the methyltransferase superfamily. RsmB/NOP
                                                           "Complete genome sequence of Vibrio vulnificus CMCP6.";
Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: Specifically methylates the cytosine at position 967
(m5C967) of 16S rRNA (By similarity).
-!- CATALYTIC ACTIVITY: S-adenosyl-L-methionine + rRNA = S-adenosyl-L-homocysteine + rRNA containing C(5)-methylcytosine.
-!- SIMILARITY: Belongs to the methyltransferase superfamily. RsmB/NOP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TIGRPAMS; TIGRO0563; rsmB; 1.
PROSITE; PS01LS3; NOL1 NOP2 SUN; 1.
Complete proteome; Methyltransferaes; rRNA processing; Transferase.
SEQUENCE 426 AA, 47677 NW; D53200B63B05CDFC CRC64;
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05-JUL-2004 (Rel. 44, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Nibosomal RNA small subunit methyltransferase B (EC 2.1.1.-) (rRNA (cytosine-C(5)-)-methyltransferase) (16S rRNA m5C967
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Chen C.-Y., Wu K.-M., Chang Y.-C., Chang C.-H., Tsai H.-C., Liu Y.-M., Liu Y.-M., Shen H.-J., Shen A.B.-T., Li J.-C., Eshao C.-P., Lee C.-T., Hor L.-I., Tsai S.-F.;
"Comparative genome analysis of Vibrio vulnificus, a marine
Rhee J.H., Kim S.Y., Chung S.S., Kim J.J., Moon Y.H., Jeong Choy H.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bacteria, Proteobacteria, Gammaproteobacteria, Vibrionales, Vibrionaceae, Vibrio.
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InterPro; IPR001673; Fmu mffrase.
InterPro; IPR001679; Fmu NOL1/Nop2p.
InterPro; IPR066027; NusB.
InterPro; IPR066174; NusB. region.
InterPro; IPR06174; NusB. region.
InterPro; IPR000191; SAM Eind.
Pfam; PP01189; NOI1 NOP2.Sun; 1.
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Matches 6; Conservative
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between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
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-!- FUNCTION: Specifically methylates the cytosine at position 967
-!- GIGS FRNA (By similarity).
-!- CATALYTIC ACTIVITY: S-adenosyl-L-methyloytosine.
-!- CATALYTIC ACTIVITY: S-adenosyl-L-methylcytosine.
-!- SIMILARITY: Belongs to the methyltransferase superfamily. RsmB/NOP
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STRAIN=RIMD 2210633 / Serotype 03:K6;
MEDLINE=22508454; PubMed=12620739;
Makino E., Oshima K., Kurokawa K., Yokoyama K., Uda T., Tagomori K.,
Iijima Y., Najima M., Nakano M., Yamashita A., Kubota Y., Kimura S.,
Yasunaga T., Honda T., Shinagawa H., Hattori M., Iida T.;
"Genome sequence of Vibrio parahamolyticus: a pathogenic mechanism
distinct from that of V. cholerae.";
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InterPro; IPR001678; Fmu MoL1/Nop2p.
InterPro; IPR001678; Fmu NOL1/Nop2p.
InterPro; IPR0006714; NusB.
InterPro; IPR000051; SAM Dind.
Pfam; PF01029; NusB. 1.
ProDom; PF01029; NusB. dom; 1.
ProDom; PF01029; NusB. j.
ProSTTE; P501153; NOL1 NOP2 Sun; 1.
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05-JUL-2004 (Rel. 44, Last annotation update)
Ribosomal RNA small subunit methyltransferase B (EC 2.1.1.-) (rRNA (cytosine-C(5)-)-methyltransferase) (16S rRNA m5C967
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nes 6; Conservative
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-!- CATALVITIC ACTIVITY: S-adenosyl-L-methionine + rRNA = S-adenosyl-L-homocysteine + rRNA containing C(5)-methylcytosine.
-!- SIMILARITY: Belongs to the methyltransferase superfamily. RsmB/NOP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=22421331; PubMed=12533478; Wan Sluys M.A., de Oliveira M.C., Monteiro-Vitorello C.B., Van Sluys M.A., de Oliveira M.C., Monteiro-Vitorello C.B., Moon D.H., Takita M.A., Lemos E.G.M., Machado M.A., Ferro M.I.T., da Silva F.R., Goldman M.H.S., Goldman G.H., Lemos M.V.F., El-Dorry H., Tsai S.M., Carrer H., Carraro D.M., de Oliveira R.C., Numes L.R., Siqueira W.J., Coutinho L.L., Kimura E.T., Ferro E.S., Harakava R., Kuramae E.E., Marino C.L., Giglioti E., Abreu I.L., Alves L.M.C., do Amaral A.M., Baia G.S., Blanco S.R., Brito M.S., Cannavan F.S., Celestino A.V., da Cunha A.F., Fenille R.C., Ferro J.A., Formighieri E.F., Kishi L.T., de Souza A.A., Truffi D., Tsukumo F., Yanai G.M., Zaros L.G., Civerolo E.L., Simpson A.J.G., Almeida N.F. Jr., Setubal J.C.,
                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                   PROSITE; PSO1153; NOL1 NOP2 SUN; 1.
Complete protecome; Methyltransferase; rRNA processing; Transferase.
SEQUENCE 427 AA; 47835 MW; 653C0C335D1D6B5C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUL-2004 (Rel. 44, Created)
05-JUL-2004 (Rel. 44, Last sequence update)
05-JUL-2004 (Rel. 44, Last nunotation update)
81-JUL-2004 (Rel. 44, Last annotation update)
Ribosomal RNA small subunit methyltransferase B (EC 2.1.1.-) (rRNA (cytosine-C(5)-)-methyltransferase) (16S rRNA m5C967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Comparative analyses of the complete genome sequences of Pierce's disease and citrus variegated chlorosis strains of Xylella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Name=rsmB; Synonyms=rrmB; OrderedLocusNames=PD1761;
Xylella fastidiosa (strain Temeculal / ATCC 700564).
Bacteria; Proteobacteria; Gammaproteobacteria; Xanthomonadales;
Xanthomonadaceae; Xylella.
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100.0%; Pred. No. 1.7e+02;
tive 0; Mismatches 0; Indels
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InterPro; IPR001601; Methyltransf.
InterPro; IPR006027; NusB.
InterPro; IPR001678; Fmu_NOL1/Nop2p.
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                     InterPro; IPR006027; NusB.
ThterPro; IPR000051; SAM bind.
Pfam; PF01189; Nol1 Nop2 Sun; 1.
Pfam; PF01029; NusB; 1.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=183190;
                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                    4 APMWLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kitajima J.P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fastidiosa.";
                                                                                                                                                                                                                                                                                    . 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        087AR1;
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                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                        Pfam; PF01189; Noll_Nop2_Sun; 1.
Pfam; PF01029; NusB; 1.
PROSITE; PS01153; NoLL NOP2_SUN; 1.
Complete proteome; Methyltransferase; rRNA processing; Transferase.
SEQUENCE 431 AA; 46932 MW; 35C7C763BAB0908B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .,
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Sordariomycetidae; Sordariales; Sordariaceae; Neurospora.
NCBI_TaxID=5141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Putative Sun protein.
Name=T4096; OrderedLocusNames=PBPRA3581;
Photobacterium profundum (Photobacterium sp. (strain SS9)).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30.0%; Score 6; DB 2; Length 431; 100.0%; Pred. No. 1.7e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                           30.0%; Score 6; DB 1; Length 431; 100.0%; Pred. No. 1.7e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL/ Vernamery data.

EMBL, AABXOL000339; EAA30904.1; -,

EMBL, AABXOL000339; 48408 NW; 9E466BBFFB0D173B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      431 AA
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                                                                                                                                                                                                                                  30.00,
100.0%; Pre-
IPR000051; SAM bind.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-2004 (TrEMBLrel. 26, 01-MAR-2004 (TrEMBLrel. 26, 01-MAR-2004 (TrEMBLrel. 26,
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Matches 6; Conservative
                                                                                                                                                                                                                                                                                                 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                  167 APMWLR 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LETKFL 404
                                                                                                                                                                                                                                                          Best Local Similarity
Matches 6; Conserv
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Name=NCU05614.1;
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177 APMWLR 182
                                                                                                              methyltransferase).
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                                                      05-JUL-2004 (
05-JUL-2004 (
01-OCT-2004 (
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                                            Q9KVŪS;
                       RSMB_VIBCH
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          RESULT 36
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0
                                                     Vezzi A., Campanaro S., D'Angelo M., Simonato F., Vitulo N., Lauro F., Cestaro A., Malacrida G., Simionati B., Cannata N., Bartlett D.,
                                                                                     "Genome analysis of Photobacterium profundum reveals the complexity of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vezzi A., Campanaro S., D'Angelo M., Simonato F., Vitulo N., Lauro F.,
Cestaro A., Malacrida G., Simionati B., Cannata N., Bartlett D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Genome Analysis of Photobacterium profundum reveals the complexity of
                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Photobacterium profundum (Photobacterium sp. (strain SS9)).
Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales;
Vibrionaceae; Photobacterium.
Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30.0%; Score 6; DB 2; Length 431; 100.0%; Pred. No. 1.7e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                       DB 2; Length 431; . 1.7e+02;
                                                                                              high pressure adaptations.";
Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases.
BKMBL, CR378674; CAG21837.1;
InterPro; IPR004573; Fmu mtfrase.
InterPro; IPR004573; Fmu MDLI/Nop2p.
InterPro; IPR006027; NusB.
InterPro; IPR006174; NusB. region.
InterPro; IPR001638; SBP bac 3.
Pfam; PF01189; No11 Nop2 Fmu, 1.
                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cestaro A.;
Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; CR378674; CAG21837.1; -.
SEQUENCE 431 AA; 48054 MW; 1B5D728A0D557688 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 high pressure adaptations.";
Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                   431 AA; 48054 MW; 1B5D728A0D557688 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                    10-MAY-2004 (TrEMBLrel. 27, Created)
10-MAY-2004 (TrEMBLrel. 27, Last sequence update)
10-MAY-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                 PROSITE; PS01153; NOL1 NOP2 SUN; 1.
PROSITE; PS01039; SBP_BACTERIAL_3; UNKNOWN_1.
                                                                                                                                                                                                                                                                                       Score 6; DB 2; Pred. No. 1.7e 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                431 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                           ProDom; PD005242; NusB_region; 1.
TIGRFAMs; TIGR00563; rsmB; 1.
                                                                                                                                                                                                                                                                                      30.0%; E
           Vibrionaceae; Photobacterium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6; Conservative
                                                                                                                                                                                                                                                                                                             6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Putative Sun protein.
T4096 OR PBPRA3581.
                                                                                                                                                                                                                                                                                                                                                          169 APMWLR 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                169 APMWLR 174
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Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                       Complete proteome. SEQUENCE 431 AA;
                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                    4 APMWLR 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                  NCBI_TaxID=74109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=74109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=889;
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                                                                                                                                                                                                                                                                                                                                                                                                               CAG21837
CAG21837;
                                                                          Valle G.;
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CAG21837
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -- FUNCTION: Specifically methylates the cytosine at position 967
-- GATALVITC ACTIVITY: S-adenosyl-L-methionine + TRNA = S-adenosyl-L-homocoysteine + TRNA containing ((5)-methyloytosine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.

STRAIN=El Tor NIG961 / Serctype O1;

MEDLINE=20406833 PubMed=10952301; DOI=10.1038/35020000;

MEDLINE=20406833 PubMed=10952301; DOI=10.1038/35020000;

Heidelberg J.F., Eisen J.A., Nelson W.C., Clayton R.A., Gwinn M.L., Dodson R.J., Haft D.H., Hickey E.K., Peterson J.D., Umayam L.A., Gill S.R., Nelson K.E., Read T.D., Tettelin H., Richardson D.L., Ermolaeva M.D., Vamathevan J.J., Bass S., Qin H., Dragoi I., Ermolaeva M.D., White O., Salzberg S.L., Smith H.O., Colwell R.R., Merman W.C., White O., Salzberg S.L., Smith H.O., Colwell R.R., Mexalanos J.J., Venter J.C., Fraser C.M.;

"DNA sequence of both chromosomes of the cholera pathogen Vibrio cholerae.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Complete proteome; Methyltransferase; rRNA processing; Transferase.
SEQUENCE 434 AA; 48340 MW; D03DE106F9F85ADD CRC64;
                                                                                             05-JUL-2004 (Rel. 44, Last sequence update)
01-OCT-2004 (Rel. 45, Last annotation update)
Ribosomal RNA small subunit methyltransferase B (EC 2.1.1.-) (rRNA (cytosine-C(5)-)-methyltransferase) (16S rRNA m5C967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
                                                                                                                                                                                                                                                                                                                                    Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales;
Vibrionaceae; Vibrio.
NCBL_TaxID=666;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 434;
                                                                                                                                                                                                                                                                            Name=rsmB; Synonyms=rrmB; OrderedLocusNames=VC0044; Vibrio cholerae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30.0%; Score 6; DB 1; Le1
100.0%; Pred. No. 1.7e+02;
ive 0; Mismatches 0;
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434 AA.
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InterPro; IPR004573; Fmu_mtfrase.
InterPro; IPR001678; Fmu_NOL1/Nop2p.
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TIGRFAMS; TIGR00563; rsmB; 1.
PROSITE; PS01153; NOL1_NOP2_SUN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR006174; NusB_region.
InterPro; IPR000061; SAM Bind.
Pfam; PF01189; Noll_Nop2_Sun; 1.
Pfam; PF01029; NusB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; AE004095; AAF93222.1; -. PIR; G82372; G82372.
                                                                   (Rel. 44, Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nature 406:477-483(2000).
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(Rel. 44, Last sequence update) (Rel. 44, Last annotation update)

437 AA

STANDARD;

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CSTRAIN—ATCC 33913 / NCPPB 528;

WEGENER FROM N.A.

WEGENER FROM N.A.

WEGENER STRAIN—ATCC 33913 / NCPPB 528;

WEGENER STRAIN—ATCC 31913 / NCPPB 528;

WE SILVA A.C.R., Ferro J.A., Reinach C.S., Furlan L.R.,

A Quaggio R.B., Monteiro-Vitorello C.B., Van Sluys M.A., Almeida N.F.,

A Alves L.M.C. do Amaral A.M., Bertolini M.C., Camargo L.B.A.,

Caracili R.M.B., Coutinho L.L., Cursino-Santos J.R., El-Dorry H.,

Raria J.B., Ferreira A.J.S., Ferreira R.C.C., Ferro M.I.T.,

Raria J.B., Ferreira A.J.S., Ferreira R.C.C., Gruber A.,

Ratsuyama A.M., Kishi L.T., Leite R.P., Lemos B.G.M., Lemos M.V.F.,

Locali E.C., Machado M.A., Madeira A.M.B.N., Martinez-Rossi N.M.,

Martins E.C., Maidanis J., Menck C.F. M., Mayaki C.Y., Moon D.H.,

Moreira L.M., Novo M.T.M., Okura V.K., Oliveira M.C., Oliveira V.R.,

Spinola L.A.F., Tarkita M.A., Tammra R.E., Teixeira E.C., Tezza R.I.D.,

Spinola L.A.F., Tarkita M.A., Tammra R.E., Teixeira E.C., Tezza R.I.D.,

Setubal J.C., Kitajima J.P.,

Thomparison of the genomes of two Xanthomonas pathogens with differing
                                                                                                                                                                                         Ribosomal RNA small subunit methyltransferase B (EC 2.1.1.-) (rRNA (cytosine-C(5)-)-methyltransferase) (16S rRNA m5C967
                                                                                                                                                                                                                                                                                                                               Xanthomonas campestris (pv. campestris).Bacteria; Yroteobacteria; Gammaproteobacteria; Xanthomonadales;
                                                                                                                                                                                                                                                                                             Name=rsmB; Synonyms=rrmB, sun; OrderedLocusNames=XCC3747;
                                                                                                                                                                                                                                                                                                                                                                                             Xanthomonadaceae; Xanthomonas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                              methyltransferase)
                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=340;
                                                                                                                           05-JUL-2004
05-JUL-2004
                                  SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE TO A TCC 13902 / XV 101;

STAIN=306 / ATCC 13902 / XV 101;

MEDLINE=22022145; PubMed=12024217; DOI=10.1038/417459a;

A Silva A.C.R., Ferro J.A., Reinach F.C., Farah C.S., Furlan L.R.,

A Quaggio R.B., Monteiro-Vitorello C.B., Van Sluys M.A., Almeida N.F.,

Alves L.M.C., do Amaral A.M., Bertolini M.C., Camargo L.B.A.,

Alves L.M.C., do Amaral A.M., Bertolini M.C., Camargo L.B.A.,

A Raves L.M.C., Cannavan F., Cardozo J., Chambergo F., Ciaphna L.P.,

Caraclli R.M.B., Coutinho L.L., Cursino-Santos J.R., El-Dorry H.,

Formighieri B.F., Franco M.C., Greggio C.C., Gruber A.,

Ratsuyama A.M., Kishi L.T., Leite R.P., Lemos B.G.M., Lemos M.V.F.,

Locall E.C., Machado M.A., Madeira A.M.B.W., Martinez-Rossi N.M.,

Moreira L.M., Novo M.T.M., Okura V.K., Oliveira M.C., Oliveira V.R.,

Pereira H.A., Rossi A., Sana J.A.D., Silva C., de Souza R.F.,

Spinola L.A.F., Takita M.A., Tauntra R.B., Teixeira E.C., Tezza R.I.D.,

A Spinola L.A.F., Takita M.A., Truffi D., Tsai S.M., White F.F.,

Sctubal J.C., Kitajima J.P.;

Noter Specificities of the genomes of two Xanthomonas pathogens with differing the comparison of the genomes of two Xanthomonas pathogens with differing the comparison of the genomes of two Xanthomonas pathogens with differing the comparison of the genomes of two Xanthomonas pathogens with differing the comparison of the comparison of two Xanthomonas pathogens with differing the comparison of the comparison of two Xanthomonas pathogens with differing the comparison of the comparison of two Xanthomonas pathogens with differing the comparison of the comparison of two Xanthomonas pathogens with differing the comparison of the comparison of two Xanthomonas pathogens with differing the comparison of the comparison of two Xanthomonas pathogens with differing the comparison of the comparison of two Xanthomonas pathogens with differing the comparison of two Xanthomonas pathogens with differing the comparison of two Xanthomonas pathogens with differing the comparison of two Xa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (m5C967) of 16S rRNA (By similarity).
-!- CARTALYTIC ACTIVITY: S-adenosyl-L-methionine + rRNA = S-adenosyl-L-homocysteine + rRNA containing C(5)-methylcytosine.
-!- SIMILARITY: Belongs to the methyltransferase superfamily. RsmB/NOP
                        05-JUL-2004 (Rel. 44, Created)
05-JUL-2004 (Rel. 44, Last sequence update)
N5-JUL-2004 (Rel. 44, Last annotation update)
Ribosowal RNA small subunit methyltransferase B (EC 2.1.1.-) (rRNA (cytosine-C(5)-)-methyltransferase) (16S rRNA m5C967 methyltransferase).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Complete protecme; Methyltransferase; rRNA processing; Transferase.
SEQUENCE 436 AA; 47034 MW; 02FF031ED1D04068 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nature 417:459-463(2002).
                                                                                                                                                                                                                        Name=rsmB; Synonyms=rrmB, sun; OrderedLocusNames=XAC3799;
Xanthomonas axonopodis (pv. citri).
Bacteria; Proteobacteria; Gammaproteobacteria; Xanthomonadales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 436; . 1.7e+02; ches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 6; D
Pred. No.
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InterPro; IPR004573; Fmu mtfrase.
InterPro; IPR004573; Fmu mtfrase.
InterPro; IPR006027; NusB.
InterPro; IPR006027; NusB.
InterPro; IPR000517; NusB.
InterPro; IPR000517; NusB.
Ffam; PF01189; Noll_Nop2_Sun; 1.
Pfam; PF01029; NusB. 1.
ProDom; PD005242; NusB. dom; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TIGRFAMS, TIGROO563; rsmB; 1.
PROSITE; PS01153; NOL1 NOP2 SUN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30.0°,
100.0%; Pre
                                                                                                                                                                                                                                                                                                                               Xanthomonadaceae; Xanthomonas.
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                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=92829;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               subfamily.
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DATE OF THE COURT OF THE COURT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
host specificities.";
Nature 417:459-463(2002).
-!- FUNCTION: Specifically methylates the cytosine at position 967
-!- FUNCTION: Specifically methylates.
(m5C967) of 16S rRNA (By similarity).
-!- CATALYTIC ACTIVITY: S-adenosyl-L-methionine + rRNA = S-adenosyl-L-homocysteine + rRNA containing C(5)-methylcytosine.
                                                                                                                                                                                                        -!- SIMILARITY: Belongs to the methyltransferase superfamily. RsmB/NOP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProDom; PD005242; NusB_dom; 1.
TIGRPAMS; TIGR00563; rsmB; 1.
PROSITE; PS01153; NOLI_NOPS.SUN; 1.
Complete protecome; Methyltransferase; rRNA processing; Transferase.
SEQUENCE 437 AA; 47204 MW; 15F2FF80700440B3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30.0%; Score 6; DB 1; Length 437; 100.0%; Pred. No. 1.7e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Interpro; IPR004573; Fmu mtfrase.
Interpro; IPR001678; Fmu NOL1/Nop2p.
Interpro; IPR006027; NusB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR006174; NusB region.
InterPro; IPR000051; SAM_bind.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30.00,
100.0%; Pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF01189; Nol1 Nop2 Sun; 1. Pfam; PF01029; NusB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; AE012495; AAM43004.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        173 APMWLR 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 APMWLR 9
                                                                                                                                                                                                                                               subfamily
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Gaps

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Mismatches

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PRT;

PRELIMINARY;

Q6NE86; O6NE86 RESULT 39 QENE86

Neurospora crassa.

NCBI\_TaxID=5141;

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"Cloning of human, murine, and marsupial keratin 7 and a survey of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=Berkeley;
Stapleton M., Brostein P., Hong L., Agbayani A., Carlson J.,
Champe M., Chavez C., Dorsett V., Farfan D., Frise E., George R.,
Gonzalez M., Guarin H., Li P., Liao G., Miranda A., Mungall C.J.,
Munco J., Pacleb J., Parragas V., Park S., Phouanenavong S., Wan K.,
Yu C., Lewis S.E., Rubin G.M., Celniker S.;
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDLINE=20196006; PubMed=10731132;
Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.
Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
                                                                                                                           Potorous tridactylus (Potoroo).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Metatheria; Diprotodontia; Potoroidae; Potorous.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Drosophila melanogaster (Fruit fly).
Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Bphydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                   ш
                                                                                                                                                                                                                                                                                                                                                            Biochem. Biophys. Res. Commun. 297:818-827(2002).
-!- SIMILARITY: Belongs to the intermediate filament family.
EMBL. AFGO9889; AAN64033.1; -.
GO, GO:0005889; C:intermediate filament; IEA.
GO, GO:0005198; F:structural molecule activity; IEA.
InterPro, IPR011060; Apolp_III_like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 30.0%; Score 6; DB 2; Length 483; Best Local Similarity 100.0%; Pred. No. 1.9e+02; Matches 6; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                 Smith F.J.D., Porter R.M., Corden L.D., Lunny D.P., Lane McLean W.H.I.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSTIE, PS00226; IP; 1.
Intermediate filament; Keratin.
content 483 AA; 53286 MW; E3632B3267517BCE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
GH11113p (CG5288-PA) (CG5288-pb).
                                      01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             490 AA
483 AA
PRT;
                                                                                                                                                                                                                                                             MEDLINE=22246069; PubMed=12359226;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR002957; Keratin I.
InterPro; IPR003054; Keratin II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam, PF00038, Filament, 1.
PRINTS, PR01248, TYPE1KERATIN.
PRINTS, PR01276, TYPE2KERATIN.
                                                                                                                                                                                                                                                                                                                                                   expression in the mouse.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  134 QMLETK 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13 QMLETK 18
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                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                           NCBI_TaxID=9310;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q95U34; Q9VSS5;
                                                                                                           Keratin 7
                      Q8HZR5;
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                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. Schulte U., Brandt P., Fartmann B., Holland R., Schulte U., Asgn V. Hoheisel J., Brandt P., Fartmann B., Holland R., Nyakatura G., Mewes H.W., Mannhaupt G.; Submitted (MAR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. Schulte U. Aign V., Hoheisel J., Brandt P., Fartmann B., Holland R., Schulte U., Aign V., Mannhaupt G.; Newes H.W., Mannhaupt G.; Submitted (MAR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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0
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Sordariomycetidae, Sordariales, Sordariaceae, Neurospora.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Fungi, Ascomycota, Pezizomycotina, Sordariomycetes;
Sordariomycetidae, Sordariales, Sordariaceae, Neurospora.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 h 30.0%; Score 6; DB 2; Length 454; Similarity 100.0%; Pred. No. 1.8e+02; 6; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30.0%; Score 6; DB 2; Length 454; 100.0%; Pred. No. 1.8e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            German Neurospora genome project;
Submitted (JAN-2004) to the EMBL/GenBank/DDBJ databases.
EMBL, BX29538; CAF06276.1; -.
Hypothetical protein.
SEQUENCE 454 AA; 50847 MW; 52DF1FA686F940DB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 German Neurospora genome project;
Submitted (JAN-2004) to the EMBL/GenBank/DDBJ databases
EMBL; BX295538; CAF06276.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52DF1FA686F940D8 CRC64;
                                                                                             us-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
Hypothetical protein 45B12.090.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-MAR-2004 (TrEMBLrel. 27, Created)
02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
Hypothetical protein 45B12.090.
                                                                  454 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         454 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
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Query Match Best Local Similarity 10v... 6; Conservative

SEQUENCE FROM N.A.

422 LETKFL 427

15 LETKFL 20

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PRELIMINARY;

CAF06276 CAF06276;

RESULT 40

Neurospora crassa. Eukaryota; Fungi;

45B12.090.

NCBI\_TaxID=5141;

Hypothetical protein. SEQUENCE 454 AA; 50847 MW;

SEQUENCE FROM N.A.

Query Match Best Local Similarity

Matches

422 LETKFL 427

RESULT 41 **OSHZR5** 

15 LETKFL 20

ð g

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Gaps

SEQUENCE FROM N.A.

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Brandon R.C., Rogers Y.H., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Abril J.F., Agbayani A. An H.J., Andrews-Pfankcoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
Ballew R.M., Basu A., Baxendale J., Bhandari D., Bolshakov S.,
RA Ballew R.W., Basu P.V., Berman B.P., Bhandari D., Bolshakov S.,
Borkova D., Botchan M.R., Bouck J., Brokerin P., Brotter P.,
RA Burtis K.C., Busam D.A., Bulke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
Dodson K., Doup L.B., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Durbin K.J., Exangelista C.C., Ferrara C., Ferriera S., Fleischmann W.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
Alushi N., Harvey D., Heiman T.J., Harnandez J.R., Houck J.,
RA Harris N.L., Havvey D., Heiman T.J., Harnandez J.R., Houck J.,
RA Almmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Mosherson D.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Mosher D.L.,
RA Plazzolo M., Pittanan G.S., Pan S., Pollard J., Pult V., Reese M.G.,
Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,
Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,
Shies B.M., Woodager T., Weinstock G.M., Weissenbach J., Wan R.,
Wansarman D.A., Weinstock G.M., Weissenbach J., Wan R.,
RA Williams S.M., Woodager Worley K.C., Wu D., Yang S., Yan R.,
RA Milliams S.M., Woodager Worley K.C., Wu D., Yang S., Yan R.,
RA Milliams S.M., Woodager Worley K.C., Wu D., Yang S., Yan R.,
RA Milliams S.M., Woodager W., Rubin G.M., Venter D., Wan R.,
Raibbe R.A., Weers E.W., Rubin G.M., Venter J.C.,
R. The genome sequence of Drosophila melanogaster.",
R. Science 287:2185-2195(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Celniker S.E., Wheeler D.A., Krommiller B., Carlson J.W., Halpern A., Patel S., Adams M., Champe M., Dugan S.P., Frise E., Hodgson A., George R.A., Hoskins R.A., Laverty T., Muzny D.M., Nelson C.R., Pacleb J.M., Park S., Pfeiffer B.D., Richards S., Sodergren E.J., Svirskas R., Tabor P.E., Wan K., Stapleron M., Sutton G.G., Venter C., Weinstick G., Scherer S.E., Myers E.W., Gibbs R.A., Rubin G.M., "Finishing a whole-genome shotgun: release 3 of the Drosophila melanogaster euchromatic genome sequence."; Groom Ebol. 3:RESEARCH0079-RESEARCH0079(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "The transposable elements of the Drosophila melanogaster euchromatin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=22426070; PubMed=12537573;
Kaminker J.S., Bergman C.M., Krommiller B., Carlson J., Svirskas R.,
Patel S., Frise E., Wheeler D.A., Lewis S.E., Rubin G.M.,
Ashburner M., Celniker S.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Misra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S., Hradecky P., Huang Y., Kaminker J.S., Millburn G.H., Prochnik S.E., Smith C.D., Tupy J.L., Whitfied B.J., Bayraktaroglu L., Berman B.P., Bettencourt B.R., Celniker S.E., de Grey A.D., Drysdale R.A., Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q., Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Annotation of the Drosophila melanogaster euchromatic genome: a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a genomics perspective.";
Genome Biol. 3:RESEARCH0084-RESEARCH0084(2002).
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Genome Biol. 3:RESEARCH0083-RESEARCH0083(2002)
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MEDLINE=22426065; PubMed=12537568;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE=22426069; PubMed=12537572;
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Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases.

SEQUENCE FROM N.A.

FLYBASE

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mol. Gen. Genet. 257:62-70(1997).
-!- FUNCTION: Mediates oxidative stress response. Involved in both the oxidative and cadmium response pathways.
-!- SUBCELLULAR LOCATION: Woclear.
-!- SIMILARITY: Belongs to the bZIP family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=98102743; PubMed=9439570;
Billard P., Dumond H., Bolotin-Fukuhara M.;
"Characterization of an AP-1-like transcription factor that mediates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATP-binding, Carbohydrate metabolism; Galactose metabolism; Kinase;
                             Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases.
-!- CATALYTIC ACTIVITY: ATP + D-galactose = ADP + D-galactose 1-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kluyveromyces lactis (Yeast).
Eukaryota, Fungi, Ascomycota; Saccharomycotina; Saccharomycetes;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 490;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              an oxidative stress response in Kluyveromyces lactis.";
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                                                                                 -!- PATHWAY: Galactose metabolism, first step.

-!- SIMILARITY: Belongs to the GHMP kinase family.

EMBL, AVOSB337; AAL13566.1; --

EMBL, AE003553; AAF50337.2; --
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Pred. No. 1.9e+02;
                                                                                                                                                                       FlyBase; FBgn0035950; CG5288.

GO; GO: 0005737; C:cytoplasm; IEA.

GO; GO: 0005524; F:ATP binding; IEA.

GO; GO: 0004335; F:galactokinase activity; IEA.

GO; GO: 0006013; F:kinase activity; IEA.

GO; GO: 0006012; P:metabolism; IEA.

GO; GO: 00016310; P:metabolism; IEA.

GO; GO: 00016310; P:phosphorylation; IEA.
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01-NOV-1997 (Rel. 35, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
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100.0%; Pred. No. 1...
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                                                                                                                                                                                                                                                                                                                InterPro; IPR000705; Galactokinase, InterPro; IPR006203; GHWRkns ATP. InterPro; IPR006204; GHWP_kinase. InterPro; IPR006206; Mev galkinase. Pfam; PF00288; GHWP_kinases, IPRSP; PRSF000530; Galactokinase; IPRSP; PR00473; GALCTOKINASE. PRINTS; PR00959; MEVGALKINASE.
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PROSITE; PS00106; GALACTÖKINASE; 1.
PROSITE; PS00627; GHMP_KINASE_ATP; 1.
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Best Local Similarity
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SEQUENCE FROM N.A.
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                                                                                                                                                        IntAct; Q95U34;
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ID AP1 KLULA
AC P56095;
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                  FLYBASE;
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ORFNames=CAGLOM021899;
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RESULT 45
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A Chen Y., Xue Y., Xu Y., Liai X., Huang L., Dong X., Ma Y., Ling L.,
Than H., Chen R., Wang J., Yu J., Yang H.;
Than H., Chen R., Wang J., Yu J., Yang H.;
The complete sequence of the T. tengcongensis genome.";
Genome Res. 12:689-700(2002).
EMBL, AE013176; AAM25485.1; -
GO, GO:00016020; C:membrane; IEA.
R GO; GO:0001562; F:ATP binding; IEA.
R GO; GO:000156; F:Lwo-component sensor molecule activity; IEA.
GO; GO:000165; F:Lwo-component sensor molecule activity; IEA.
R InterPro; IPR003594; ATPbind ATPana 
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                                                                        EMBL; AF006499; AAC39320.1; -.
HSSP; P03069; 2DGC.
Interpro; IPR004627; TF_DZIP.
Fam; PF00170; DZIP; 1.
FMART; SM0338; BRLZ; 1.
FROSITE; PS50217; BZIP; 1.
ACtivator; DNA-binding; Nuclear protein; Transcription regulation.
DNA_BIND 38 67 Basic motif.
DNA_BIND 79 107 bucine-zipper.
SEQUENCE 583 AA; 63885 MW; A4A96B12D7F5C983 CRC64;
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Bacteria; Firmicutes; Clostridia; Thermoanaerobacteriales;
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01-UUN-2002 (TrEMBLrel. 21, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
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    or send an email to license@isb-sib.ch).
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MEDLINE=21992816; PubMed=11997336;
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Pfam; PF02518; HATPase c; 1.
Pfam; PF06580; His kinase; 1.
PRINTS; PR00344; BCTRLSENSOR.
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SMART; SM00387; HATPase c; 1.
PROSITE; PS50885; HAMP; 1.
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Best Local Similarity
Matches 6; Conserv
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Best Local Similarity
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SEQUENCE 593 AA;
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Lafontaine I., de Montigny J., Marck C., Neuveglise C., Talla B.,
Goffard N., Frangeul L., Aigle M., Anthouard V., Babour A., Barbe V.,
Goffard N., Frangeul L., Aigle M., Anthouard V., Babour A., Barbe V.,
Barnay S., Blanchin S., Beckerich J.M., Beyne B., Bleykasten C.,
Boisrame A., Boyer J., Cattolico L., Confanioleri F., de Daruvar A.,
Bospons L., Fabre E., Fairhead C., Ferry-Dumazet H., Groppi A.,
Hantraye F., Hennequin C., Jauniaux N., Joyet P., Kachouri R.,
A. Hantraye F., Hennequin C., Jauniaux N., Joyet P., Kachouri R.,
A. Nicaud J.M., Nikolski M., Oztas S., Ozier-Kalogeropoulos O.,
Pellenz S., Potier B., Kichard G.F., Straub M.L., Suleau A.,
Swennene D., Tekaia F., Wesolowski-Louvel M., Weshof E., Wirth B.,
Zeniou-Meyer M., Zivanovic I., Bolotin-Fukuhara M., Thierry A.,
Bouchier C., Caudron B., Scarpelli C., Gaillardin C., Weissenbach J.,
"Genome evolution in yeasts.";
Mincker P., Souciet J.L.;
Mincker P., Souciet J.L.;
REMBI, CR380959; CAG62417.1;
REMBI, CR380959; CAG62417.1;
RINETPRO; IPRO0124; AIPPase abcentre.
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SEQUENCE FROM N.A.
SCRAIN=ATC 49256;
STRAIN=ATC 49256;
KATPATRAI V., Ivanova N., Anderson I., Reznik G., Bhattacharyya A., Gardner W.L., Mikhailova N., Larsen N., D'Souza M., Walunas T., Haselkorn R., Overbeek R., Kyrpides N.;
                                    05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Similar to sp|P28743 Saccharomyces cerevisiae YPL155c KIP2 kinesin-
related protein.
                                                                                                                                                                                                                                                                                                                                                                              Candida glabrata (Yeast) (Torulopsis glabrata).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; mitosporic Saccharomycetales; Candida.
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Bacteria; Fusobacteria; Fusobacterales; Fusobacteriaceae;
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PROSITE; PS50067; KINESIÑ MOTOR DOMAIN2; 1.
ATP-binding; Microtuble; Motor protein.
SEQUENCE 672 AA; 73932 MW; 17832DAAA3EA98FE CRC64;
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01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
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Pred. No. 2.5e+02;
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100.0%; Pred. No. ...
0; Mismatches
672 AA.
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PRT;
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PRINTS, PR00380, KINESINHEAVY.
SMART, SM00129, KISC, 1.
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Best Local Similarity 100...
5, Conservative
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PRELIMINARY;
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Eukaryota, Metazoa, Nematoda, Chromadorea, Rhabditida, Rhabditoidea,
Rhabditidae, Peloderinae, Caenorhabditis.
                                                                                                                                                                                                                                 MEDLINE=20453785; PubMed=10996789;
Gieseler K., Segalat L., Grisoni K.;
"Genetic suppression of phenotypes arising from mutations in
dystrophin-related genes in Caenorhabditis elegans.";
Curr. Biol. 10:1092-1097(2000).
  "Genome sequence of the nematode C.elegans: A platform for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Genome sequence of the nematode C.elegans: A platform for
                                                                                                                                    Matthews L.;
Submitted (AUG-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                          segalat L.S.;
Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL, Z78540, CAB01738.2; ---
EMBL, AJ133838, CAB4432.1; --
EMBL, AJ133838, CAB44432.1; --
EMFL, AJ133838, CAB44432.1; --
EMFL, AJ133838, CAB44432.1; --
EMFL, AJ133838, CAB4432.1; --
EMFL, AJ13838, CAB4432.1; --
EMFL, EMFL
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01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Hypothetical protein C33G3.1b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30.0%; Score 6; DB 2; Ler 100.0%; Pred. No. 2.9e+02; ive 0; Mismatches 0;
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STRAIN-Bristol N2;
MEDLINE-99069613; Pubmed=9851916;
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                        investigating biology.";
Science 282:2012-2018(1998).
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Science 282:2012-2018(1998)
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Best Local Similarity
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                                                                                      SEQUENCE FROM N.A. STRAIN=Bristol N2;
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                                                                                                                                Matthews
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Q8STF6
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MEDLINB=21886394; PubMed=11889109;

MEDLINB=21886394; PubMed=11889109;

MEDLINB=21886394; PubMed=11889109;

MEDLINB=21886394; PubMed=11889109;

MEDLINB=21886394; PubMed=11, Ivanova N., Reznik G., Los T., Lykidis A.,

Bhattacharyya.A., Battman A., Gardner W., Grechkin G., Zhu L.,

Na Larsen N., D'Souza M., Walunas T., Pusch G., Haselkorn R.,

Ronstein M., Kyrpides N.C., Overbeek R.;

"Genome sequence and analysis of the oral bacterium Fusobacterium

"T ucleatum strain ATCC 25586.";

"J Bacteriol. 184:2005-2018 (2002).

"BMB1, AB010549; AAL94887.1;

"Complete proteome; Hypothetical protein.

Complete proteome; Hypothetical protein.
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Rhabditidae; Peloderinae; Caenorhabditis.
                      -!- CAUTION. The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is
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Bacteria; Fusobacteria; Fusobacterales; Fusobacteriaceae;
                                                                                                                                                                        Length 772;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30.0%; Score 6; DB 2; Length 772; 100.0%; Pred. No. 2.8e+02; ive 0; Mismatches 0; Indels
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01-FEB-1997 (TrEMBLrel. 02, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-0CT-2004 (TrEMBLrel. 28, Last annotation update)
Hypotherical protein C3363.1a (DYC-1 protein) (Fragment).
Name=C3363.1a; Synonyms=dyc-1;
Caenorhabditis elegans.
                                                                                                                                                                                                                0; Indels
Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                     Hypothetical protein.
SEQUENCE 772 AA; 90058 MW; 4B861956C1F51058 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Last sequence update)
Last annotation update)
                                                                                                                                                                      30.0%; Score 6; DB 2; Ler 100.0%; Pred. No. 2.8e+02; tive 0; Mismatches 0;
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                                                              preliminary data.
EMBL; AABF01000003; EAA25145.1; -.
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MEDLINE=99069613; PubMed=9851916;
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                                                                                                                                               Query Match
Best Local Similarity 100.
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Best Local Similarity 100.
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
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Q93325
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Gaps

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Length 793;

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RX Xu J., Bjursell M.K., Himrod J. Deng S., Carmichael L.K.,
RA Xu J., Bjursell M.K., Himrod J. Deng S., Carmichael L.K.,
RA Chiang H.C., Hooper L.V., Gordon J.I.;
RT "A genomic view of the human-Bacteroides thetaiotaomicron symbiosis.";
Science 299:2074-2076[2003].
CC -1-SIMILARITY: Contains 1 HTH arac/xyls-type DNA-binding domain.
CC -1-SIMILARITY: Contains 1 histidine kinase domain.
DR GOG:0005621 CC: Crembrane IRA.
DR GO; GO:0005622 C: Crembrane IRA.
DR GO; GO:0005621 F: Kranscription factor activity; IEA.
DR GO; GO:0005621 F: Kranscription factor activity; IEA.
GO; GO:0005621 F: Kranscription factor activity; IEA.
DR GO; GO:0001602 F: Kranscription factor activity; IEA.
GO; GO:0001602 F: Kranscription factor activity; IEA.
DR GO; GO:000165; F: Wo-component response regulator activity; IEA.
GO; GO:000165; F: Wo-component response regulator activity; IEA.
GO; GO:000165; F: Wo-component response regulator activity; IEA.
DR GO; GO:000165; F: Wo-component response regulator activity; IEA.
DR GO; GO:000165; F: Wo-component response regulator activity; IEA.
DR GO; GO:000165; F: Wo-component signal transduction system (p. ..; IEA.
DR RINEPPO: IPRO0166; Chey like.
DR InterPro: IPRO0166; Chey like.
DR InterPro: IPRO01109; Response.
DR InterPro: IPRO01109; Response.
DR Fam; PFO0512; H: MistA. 1.
DR Fam; PFO0512; H: H: MistA. 1.
DR Fam; PFO045; Y: Y: Y: 1.
DR Fam; PFO045; Y: Y: Y: 1.
DR Fam; PFO045; W: Response. reg; 1.
DR Fam; PFO045; Response. reg; 1.
DR SMART; SM00387; HATBARG.
                                        01-UUN-2003 (TrEMBLrel. 24, Created)
01-UUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Two-component system sensor histidine kinase/response regulator,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS50110; RESPONSE_REGULATORY; 1.
Complete proteome; DNA-binding; Kinase; Phosphorylation;
Sensory transduction; Transcription regulation; Transferase.
SEQUENCE 1345 AA; 155269 WW; 7247BDDA9C7FADAB CRC64;
                                                                                                                                                                                                              Bacteria, Bacteroidetes, Bacteroides (class); Bacteroidales,
Bacteroidaceae, Bacteroides.
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100.0%; Pred. No. 4.6e+02;
ative 0; Mismatches 0;
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  PRT; 1345 AA
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PROSITE; PS01124; HTH ARAC FAMILY 2; 1.
                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
STRAIN=VPI-5482 / ATCC 29148;
MEDLINE=22550858; PubMed=12663928;
                                                                                                                                                   ('one-component system').
                                                                                                                                                                                              Bacteroides thetaiotaomicron.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SM00342; HTH ARAC; 1.
SM00448; REC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
  PRELIMINARY;
                                                                                                                                                                       OrderedLocusNames=BT3786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1202 VCOMLE 1207
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                                                                                                                                                                                                                                                                   NCBI_TaxID=818;
                    Q8A180;
01-JUN-2003
01-JUN-2003
01-OCT-2003
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Q9UPZ6;
                                                                                                                                                 hybrid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 52
Q9UPZ6
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MEDLINE=22789168; PubMed=12907728;

B.Sayde N.M.A., Ghedin E., Song J., MacLeod A., Bringaud F.,

El-Sayde N.M.A., Ghedin E., Song J., Hou L., Taylor S., Tweedie A.,

Larkin C., Wanless D., Peterson J., Hou L., Taylor S., Tweedie A.,

Bliteau N., Khalak H.G., Lin X., Mason T., Hannick L., Caler E.,

Blandin G., Bartholomeu D., Simpson A.J., Kaul S., Zhou H., Pai G.,

A Van Aken S., Utterback T., Zhou S., Schwartz D., Feldblyum T.,

A Gerrard C., Leech V., Qi R., Zhou S., Schwartz D., Feldblyum T.,

A Salzberg S., Tait A., Turner M.R., Ullu E., White O., Melville S.,

Adams M.D., Fraser C.M., Donelson J.E.;

The sequence and analysis of Trypanosoma brucei chromosome II.";

I. Nucleic Acids Res. 31:4856-4863(2003).

I. SIMILARITY Belongs to the Ser/Thr protein kinase family.

BMBL, AB017169; AA015877.1;

R GO, GOO05524; F:ATP binding; IFA.
                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae; Trypanosoma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATP-binding; Kinase; Serine/threonine-protein kinase; Transferase.
SEQUENCE 1037 AA; 113326 MW; A87B8C4442745274 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GO; GO:0004674; Figure in serine/threonine kinase activity; IEA.
GO; GO:0016740; F:transferase activity; IEA.
GO; GO:0016740; F:transferase activity; IEA.
GO; GO:0006468; P:protein amino acid phosphorylation; IEA.
InterPro; IPR002719; Prot. kinase.
InterPro; IPR002719; Ser thr. pkin. AS.
ProDom; PD000001; Prot kinase; I.
PROSITE; PS00107; PROTEIN KINASE DOM; I.
PROSITE; PS00110; PROTEIN KINASE DOM; I.
PROSITE; PS00109; PROTEIN KINASE DOM; I.
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                                                                                                                                                                                                                                                                                       30.0%; Score 6; DB 2; Length 887; 100.0%; Pred. No. 3.2e+02; cive 0; Mismatches 0; Indels
                                           Intact; Q8STF6; -.
NormPep; C33G3.1b; CE30500.
InterPro; IPR001036; PH related.
InterPro; IPR006020; PTB_PID.
Pfam; PF00640; PID; 1.
SNART; SN00462; PTB; 1.
PROSITE; PS01179; PID; 1.
Hypothetical protein: PiD; 1.
SPQUENCE 887 AA; 99567 MW; 4479D811513A9CA5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Last sequence update)
Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
EMBL; Z72501; CAD30431.1; JOINED EMBL; Z78540; CAD30431.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Protein kinase, putative. ORFNames=Tb927.2.4200;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6; Conservative
                                                                                                                                                                                                                                                                                                                                             6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                           497 OMLETK 502
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Best Local Similarity
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Q7YV13; 07YV13

RESULT 50

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DR DR DR KW

Q7YV13

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Gaps

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01-MAY-2000 (TrEMBLrel. 13, Created)

Matches

à

RESULT 51

Q8A180

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100.0%; Pred. No. 5.1e+02;
                            6; Conservative
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                                                                                                                          211 OMLETK 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Repeat; TPR repeat.
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                                                                                                                                                                                                                                                                                                                                                                                                                     Myxococcus xanthus.
  Best Local Similarity
                                                                          13 OMLETK 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Genome sequence and comparative analysis of the model rodent malaria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Carlton J.M., Angluoli S.V., Suh B.B., Kooij T.W., Pertea M., Silva J.C., Ermolaeva M.D., Allen J.E., Selengut J.D., Koo H.L., Peterson J.D., Pop M., Kosack D.S., Shumway M.F., Bidwell S.L., Shallom S.J., Van Aken S.E., Riedmiller S.B., Feldblyum T.V., Cho J.K., Quackenbush J., Sedegah M., Shoaibi A., Cummings L.M., Florens L., Yates F.R. III, Raine J.D., Sinden R.E., Harris M.A., Cunningham D.A., Preiser P.R., Bergman L.W., Vaidya A.B., van Lin L.H., Janse C.J., Waters A.P., Smith H.O., White O.R., Salzberg S.L., Venter J.C., Fraser C.M., Hoffman S.L., Gardner M.J.
                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
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Nature 419:512-519(2002).
-!- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plasmodium yoelii yoelii.
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NON TER 1 1 1
SEQUENCE 1502 AA; 168205 MW; F36BFA138FA49BF1 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2004 (TrEMBLrel. 26, Created)
01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
101-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Hypothetical protein (Fragment).
Name=PY05757;
01-OCT-2002 (TrEMBLrel. 22, Last sequence update) 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT; 1524 AA.
                                                                                                                                                                                                                                             TISSUE=Brain; MEDLINE=99246063; PubMed=10231032;
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EMBL, AABLO1001868; EAA17831.1;
Hypothetical protein.
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                                                KIAA0960 protein (Fragment).
Name=KIAA0960;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                           Homo sapiens (Human).
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Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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PubMed=12368865;
                                                                                                                                                                   NCBI_TaxID=9606;
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DB 2; Length 1524;

30.0%; Score 6;

Query Match

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   Gaps
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Eukaryota, Metazoa, Nematoda, Chromadorea, Rhabditida, Rhabditoidea,
Rhabditidae, Peloderinae, Caenorhabditis.
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                                                                                                                                                                                                                                                                                     Bacteria; Proteobacteria; Deltaproteobacteria; Myxococcales;
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. 8e+02;
ches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Genome seguence of the nematode C.elegans: A platform for
 Indels
                                                                                                                                                                                                                                                                                                                                                              Particul P.C., Youderian P.A.;
Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AZ04471; AZ022907.1; -.
InterPro; IPR001440; TPR.
InterPro; IPR001440; TPR.
InterPro; IPR001440; TPR.
InterPro; IPR00141; TPR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2516 AA; 280635 MW; C3D908A0E2F6CA49 CRC64;
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Submitted (MAR-1995) to the EMBL/GenBank/DDBJ databases.
EMBL; Z46583; CAA88472.1; -.
PIR; T22613; T22613.
                                                                                                                                                                                01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 26, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Adventurous gliding motility protein K (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-AUG-1998 (TrEMBLrel. 07, Last sequence update) 01-JUN-2003 (TrEMBLrel. 24, Last annotation update) Hypothetical protein F54B3.1.
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                                                                                                                                                                                                                                                                                       Cystobacterineae; Myxococcaceae; Myxococcus.
NCBI_TaxID=34;
                                                                                                                                                    2516 AA.
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Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30.0%; Score 6; DB 2
100.0%; Pred. No. 8e+
ive 0; Mismatches
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MEDLINE=99069613; PubMed=9851916;
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Science 282:2012-2018(1998)
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Indels

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Mismatches
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MEDLINE=22541850; PubMed=12655080;
..
5; Conservative
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                                                                                                      PRELIMINARY;
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Best Local Similarity
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                                            21 PRGAP 25
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MEDLINE-22541850; PubMed=12655080;

MEDLINE-22541850; PubMed=12655080;

Paez A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizoctics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL; NY192397; AA045872.1; -.

NON TER 28 28

SEQUENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
                                                                                                                                                                                                                                                                                                                SERAIN=TY2 / ATCC 700931;
STRAIN=TY2 / ATCC 700931;
STRAIN=TY2 / ATCC 700931;
MEDLINE=22531367; PubMed=12644504;
Deng W., Liou S.-R., Plunkett G. III, Mayhew G.F., Rose D.J.,
Burland V., Kodoyianni V., Schwartz D.C., Blattner F.R.;
"Comparative genomics of Salmonella enterica serovar Typhi strains Ty2 and CT18.";
                                                                    Gaps
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                                                                                                                                                                                                                                                                  Bacteria; Protecbacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Salmonella.
NCBI_TaxID=601;
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                                            30.0%; Score 6; DB 2; Length 3396; 100.0%; Pred. No. 1e+03; vative 0; Mismatches 0; Indels
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WormPep, F54B3.1; CE17865.
Hypothetical protein.
SEQUENCE 3396 AA; 391879 WW; 337F20A3A9BD2CE7 CRC64;
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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EMBL, AEO16644; AAO70500.1; -.
HYPOChetical protein.
SEQUENCE 23 AA; 2797 MW; 9EEBOBCB88CB36AA CRC64;
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment).
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01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Hypothetical protein.
OrderedLocusNames=t2947;
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                                            Query Match
Best Local Similarity
Matches 6; Conserv
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MEDLINE=22541850; PubMed=12655080;

MEDLINE=22541850; PubMed=12655080;

Pagz A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

J. Gen. YI192393; AAO45869.1; -.

NON TER 28 A2 S8

SEQÜENCE 28 AA; 3024 MW; ZE24A7A9AACA3C6A CRC64;
                                                                                                                                                                                                                                                                                                                                    Pacz A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rables epizootics in Colombia: evidence for human and dog rables associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL, AY192395; AAO45870.1;

NON TER 28 AA. 3010 MW; 2E3637A9DAACA3CGA CRC64;
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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Rhabdoviridae; Lyssavirus.
NCBL_TaxID=11292;
01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment)
Rabies virus.
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment).
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Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AX192388; AA045863.1; -.
                                                         MEDLINE=22541850; PubMed=12655080;
Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
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Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802[203].
EMBL; AY192387; AA045862.1; -.
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Rhabdoviridae; Lyssavirus.
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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NON_TER 28
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Best Local Similarity 100.
Matches 5; Conservative
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SEQUENCE FROM N.A.
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    NCBI_TaxID=11292;
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"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AX192390; AA045865.1; -.
NON TER 28 28 28
SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
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Viruses; ssRNA negative-strand viruses; Mononegavirales;
Rhabdoviridae; Lyssavirus.
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Rhabdoviridae; Lyssavirus.
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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01-UDN-2003 (TrEMBLrel. 24, Last sequence update)
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  28 AA.
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MEDLINE=22541850; PubMed=12655080;
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NCBI_TaxID=11292;
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Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AX192381; AA045856.1; -.
NON TER 28 28
SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE=22541850; PubMed=12655080;
MEDLINE=22541850; PubMed=12655080;
Medleular Epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AX192383; AA045858.1; -.
NON TER 28 28
SEQÜENCE 28 AA; 3010 MW; ZE3337A9AACA3CGA CRC64;
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Rhabdoviridae; Lyssavirus.
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Rhabdoviridae; Lyssavirus.
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MEDLINE=22541850; PubMed=12655080;
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Paez A., Nunez C., Garcia C., Boshell J.;
Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802 (2003).

EMBL; AY192384; AA045859.1; -.
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MEDLINE=22241850; PubMed=12655080;

MEDLINE=22241850; PubMed=12655080;

Pagz A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802 (2003).

J. Gen. YI192386; AAQ45861.1; -.

NON TER 28 28

SEQÜENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
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Paez A., Nunez C., Garcia C., Boshell J.,
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AX192378; AA045853.1; -.
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"Molecular epidemiology of rables epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
BMBL: AX192374, AA045849.1;
NON TER 28
SEQÜENCE 28 AA; 2998 MW; ZE3147A9AACA3CGA CRC64;
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Paez A., Numez C., Gazrcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
ENBL; AY192380; AAO45855.1; -.
NON TER 28
SEQUENCE 28 AA; 3010 MW; 2E3837A9AACA3C6A CRC64;
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MEDLINE=22541850; PubMed=12655080;
Paez A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AY192379; AAO45854.1; -.
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Rhabdoviridae; Lyssavirus.
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SEQUENCE FROM N.A.

MEDLINE=22541850; PubMed=12655080;

PAGE A., Nunez C., Garcia C., Boshell J.;

PAGE A., Nunez C., Garcia C., Boshell J.;

"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";

J. Gen. Virol. 84:795-802(2003).

EMBL, A1192373; AA045848.1; -.

NOW TER

SEQUENCE 28 AA; 3010 MW; 2E3637A9AACA3C6A CRC64;
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SEQUENCE FROM N.A.
MEDLINE=22541850; PubMed=12655080;
Pacz A., Nunez C., Garcia C., Boshell J.;
"Molecular epidemiology of rabies epizootics in Colombia: evidence for human and dog rabies associated with bats.";
human and dog rabies associated with bats.";
J. Gen. Virol. 84:795-802(2003).
EMBL; AY192372; AAO45847.1; -.
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment).
L protein (Fragment).
Viruses; ssRNA negative-strand viruses; Mononegavirales;
Rhabdoviridae; Lyssavirus.
100.0%; Pred. No. 2e+02; ative 0; Mismatches 0; Indels
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Rhabdoviridae; Lyssavirus.
NCBI_TaxID=11292;
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01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
10-JUN-2003 (TrEMBLrel. 24, Last annotation update)
L protein (Fragment).
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Sequences AAB11630-B11688 represent proteins from Agrobacterium vitis
which elicit a hypersensitivity response (HR) in a plant. The invention
also relates to nucleotide sequences (AAA61501-A61524) encoding the A.
vitis HR elicitor proteins. The HR is a rapid, localised necrosis that is
associated with the active defence of plants against many pathogens, and
cocur when a pathogenic organism interacts with a nonhost plant (i.e.
one in which intracellular bacterial growth and disease development do
not occur). Like other HR elicitors, the A. vitis elicitor functions in
non-host plants by causing a rapid hypersensitive response that results
in walling-off and killing of the pathogen. On grape plants, the A. vitis
c elicitor induces a restricted necrosis of tissues, resulting in the death
of plant cells and induction of pathogen resistance. A. vitis HR elicitor
of plant cells and induction form, are used to treat plants or their seeds
to impart resistance to disease, such as those caused by fungi, bacteria
or viruses; and to enhance growth, e.g., to increase yield or to provide
extless germination or maturation. The proteins can also be used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New protein from Agrobacterium vitis, useful e.g. for imparting resistance to disease or stress to plants, is involved in production of a
 Adf94731 Hepatitis
Adf94733 Hepatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A. vitis HR elicitor proteins, or nucleic acids encoding them, may allow control of previously untreatable diseases; provide systemic treatment; and eliminate the need for biological control agents or polluting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         control insects, to impart resistance to environmental stresses, e.g., cold, and to improve nutritional value, e.g., altered oil content. The same effects can be produced by producing transgenic plants or seeds by incorporation of DNA that encodes A. vitis HR elicitor proteins. Use of
                                                                                                                                                                                                                                                                                                                       Hypersensitive response elicitor protein; HR; disease resistance; insecticide; fungicide; antiviral; bactericide; growth enhancer;
                                                                                                                                                                                                                                                                                  A. vitis hypersensitive response elicitor protein, SEQ ID NO:59.
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                                                                                                                                                                                                                                                                                                                                                             stress resistance; transgenic plant.
                                                                                                                                                                     AAB11672 standard; protein; 106 AA.
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100.0%;
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This invention describes novel nucleic acid (cDNA) sequences (A) which have anticancer activity and are highly expressed in ovarian tumor tissue (and some also in testis and breast cancer tissue). The products of the invention can be used for gene therapy. (A) are used (i) for recombinant expression of polypeptides (B) and (ii) to isolate complete genes. (B) are used (i) to identify agents suitable for treatment of ovarian cancer; (ii) directly for treating this form of cancer (including expression from gene therapy vectors) and (iii) for generation of specific antibodies.

(A) are identified by assembling ESTs (expressed sequence tags) from a particular tissue type before comparison of expression patterns. This allows a significantly longer fragment of the gene to be revealed, so should reduce the number of failures associated with the fact that ESTs from different libraries may represent different parts of the same unknown gene, distorting the estimated frequency of occurrence in a particular tissue. ANY7605-Y7663B represent protein fragments encoded by the human ovarian tumor CDNA library derived EST fragments represented in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acid sequences expressed in ovarian, and some other, cancer tissues, and derived polypeptides, for treatment of ovarian cancer and identification of therapeutic agents.
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                                                                                                                                                                                                                                                                                               tag; EST; human; ovarian tumor; anticancer;
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                                                                                                                                                                                                                                                               Human ovarian tumor EST fragment encoded protein 117.
Mismatches
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                                                                                                                                                         AAY76621 standard; protein; 147 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                      AAY76621
ID AAY
                                                                                                                        RESULT
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RESULT

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07-JUN-2001; 2001WO-US018569.
                                                                                                                              (HUMA-) HUMAN GENOME SCI INC.
                                                                                                      07-JUN-2000; 2000US-0209467P
                                 WO200200677-A1.
           Homo sapiens
                                                         03-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABB60668;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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ABB60668
HXXXX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·
0
                                                                                                                                                                                                                                                                                                                                                                                                        The invention describes a new isolated nucleic acid encoding a Klebsiella pneumoniae polypeptide. Also described are: a recombinant expression vector comprising the nucleic acid, operably linked to a transcription regulatory element; and a cell comprising the recombinant expression vector. The nucleic acid is useful for preparing a vaccine composition against Klebsiella pneumoniae. This is the amino acid sequence of a Klebsiella pneumoniae polypeptide of the invention
                                                                                                                                                                                                                                                                                                                                                 New nucleic acid encoding a Klebsiella pneumoniae polypeptide, useful for preparing a vaccine composition against Klebsiella pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour; ovarian cancer; breast cancer; tumour; reproductive system disorder; infertility; pregnancy disorder; anovulation; polycystic ovary syndrome; PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection; inflammatory condition; immune disorder; blood disorder; cardiovascular disorder; respiratory disorder; neurological disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gastrointestinal disorder; urinary system disorder; drug screening; gene therapy; chromosome mapping; forensic analysis; antibody preparation; cytostatic; immunomodulatory; neuroprotective; antiinflammatory; gynaecological; reproductive.
                                                                                                      Recombinant expression vector; transcription regulatory element; Klebsiella pneumoniae protein; antibacterial; Vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30.0%; Score 6; DB 7; Length 169; 100.0%; Pred. No. 1.1e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human ovarian antigen HTELJ95, SEQ ID NO:3133.
                                                                                 Klebsiella pneumoniae polypeptide seqid 8944
                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 8944; 932pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABP42001 standard; protein; 285 AA
             ABO62427 standard; protein; 169 AA
                                                                                                                                                                                                                                                                (GENO-) GENOME THERAPEUTICS CORP.
                                                                                                                                                                                                                  27-JAN-2000; 2000US-00489039.
                                                                                                                                                                                                                                          29-JAN-1999; 99US-0117747P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6; Conservative
                                                                                                                                                                                                                                                                                        Breton GL, Osborne M;
                                                                                                                                           Klebsiella pneumoniae.
                                                                                                                                                                                                                                                                                                                WPI; 2003-895346/82.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90 GAPMWL 95
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                                                                                                                                                                                                                                                                                                                             N-PSDB; ACH95978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 169 AA;
                                                                                                                                                                  US6610836-B1
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                                                            29-JUL-2004
                                                                                                                                                                                          26-AUG-2003
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                                    AB062427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 4
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   ABO62427
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                                                                                                                                                                                                                                                                      useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian cancer), immune disorders, cardiovascular disorders and neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to 2175 novel human ovarian antigens (ABP41054-ABP43228) and to CDNAs encoding them (ABQ54131-ABQ56305), and also encompasses polypeptides 90% identical and polynucleotides 95% identical to the sequences of the invention. The invention additionally relates to recombinant vectors and host cells comprising human ovarian antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and urinary system disorders. Ovarian antiger polypeptides and unitary system disorders. Ovarian antiger polypeptides and polymucleotides may also be used in screening for compounds which modulate ovarian antigen expression or activity. The polymucleotides may further be used for gene therapy, chromosome mapping, in the polypeptides may be used as food additives or to prepare antibodies useful in disease diagnosis, drug targeting and phenotyping. The present sequence represents a human ovarian antigen of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/bub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                   Isolated nucleic acid molecules encoding novel ovarian polypeptides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·,
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. 1.7e+02;
ches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30.0%; Score 6; DB 5
100.0%; Pred. No. 1.7
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 11; SEQ ID NO 3133; 2922pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABB60668 standard; protein; 315 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6; Conservative
Birse CE, Rosen CA,
                                                                                         WPI; 2002-147878/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178 LETKFL 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 285 AA;
                                                                                                                                               N-PSDB; ABQ55078
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secretory
or diseases in
                                                                                                                                 hii S;
Tamechika I;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 energy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                             New polynucleotides encoding full-length polypeptides, e.g. secreton and/or membrane proteins, useful for developing medicines for diseas which the gene is involved, or as target molecules for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ovesity; anorexia; weight maintenance; impaired muscle development; diabetes; alkylguanine alkyltransferase; energy imbalance; enzyme; gene therapy; human; AGT.
                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to novel human secretory or membrane proteins (ADA54072-ADA55710) and their coding sequences (ADA52433-ADA54071). The coding sequences are useful in the gene therapy of diseases caused by abnormalities of the proteins, e.g. cancer, inflammatory diseases, osteoporosis or neurological disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful for diagnosing or treating obesity, anorexia, diabetes or imbalance, and as targets for agents which act as modulators of physiological processes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid molecule expressed in liver or stomach
                                                                                                                                 Ishii
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                                                                                                                                                 Ж,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30.0%; Score 6; DB 6; Length 395; 100.0%; Pred. No. 2.1e+02; ive 0; Mismatches 0; Indels
                                                                                                                             Otsuki T, Wakamatsu A, Sato H,
Hio Y, Otsuka K, Nagai K, Irie
Otsuka M, Nagahari K, Masuho Y;
                                                                                                                                                                                                                                                                                                                                      Claim 14; SEQ ID NO 3019; 205pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAE34476 standard; protein; 395 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Miller JE;
                                                                      (HELI-) HELIX RES INST.
(REAS-) RES ASSOC BIOTECHNOLOGY.
               14-SEP-2001; 2001JP-00328381.
24-JAN-2002; 2002US-0350435P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-MAY-2002; 2002WO-AU000628.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-MAY-2001; 2001AU-00005137.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AUTO-) AUTOGEN RES PTY LTD. (UYDE-) UNIV DEAKIN. (ITDI-) INT DIABETES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6; Conservative
                                                                                                                           Isogai T, Sugiyama T,
Yamamoto J, Isono Y,
Seki N, Yoshikawa T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human AGT-114 protein.
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                                                                                                                                                                                                      WPI; 2003-395539/38.
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Best Local Similarity
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                                                                                                                                                                                                                            N-PSDB; ADA53812.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 395 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200295020-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             365
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ношо
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13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL16175) and the encoded proteins (ABB57737-ABB72072). The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signaling and cell-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                               Drosophila; developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 8796; 21pp + Sequence Listing; English.
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             Drosophila melanogaster polypeptide SEQ ID NO 8796.
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100.0%; Pred. No....
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                          Myers EW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADA55451 standard; protein; 395 AA
                                                                                                                                                                                                                                                                                                                                                        PWD,
                                                                                                                                                                                                                      23-MAR-2001; 2001WO-US009231.
                                                                                                                                                                                                                                                           23-MAR-2000; 2000US-0191637P
                                                                                                                                                                                                                                                                             11-JUL-2000; 2000US-00614150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-MAR-2002; 2002EP-00006586,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human protein, SEQ ID 3019
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100,
Matches 6; Conservative
                                                                                                        Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                      Venter JC, Adams M,
                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-656860/75.
N-PSDB; ABL04771.
                                                                                                                                                                                                                                                                                                                 (PEKE ) PE CORP NY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 315 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40 LETKFL
                                                                                                                                             WO200171042-A2.
                                                                      pharmaceutical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        interactions
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